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PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C. BRANCH OFFICE :

> NORMANBY CHAMBERS, MELBOURNE. Published every Saturday.

Bubscription 10s. per year, payable in advance; commencing from any date.

Post free to every country in the world. Single copies, 4d. each. Supplied only to persons connected with the Trade. For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

## Piterary Contents.

PPAGE-	PAGE
Competition No. 11: Dispens-	Editorial Notes (cent.): -
ing Labels (Illustrated) 239	The Pharmaceutical Confer-
Consuls' Reports 249	ence 253
Correspondence :-	Foreign and Colonial 248
The Use of Brokers: Break-	
down of the Irish Pharmacy	French Correspondence 233
Act: Construing the Medi-	Gazette 246
cine Stamp Act 260	Marriages 243
	Metropolitan Reports 236
Dispensing Errors; a Stove	New Companies 243
Wanted; The Toughened-	Notes of Novelties 243
glass Mortar 261	Personalities
Stencil Plates	
Legal Queries 262	Practical Notes and Formulæ . 247
Dispensing Notes 262	Provincial Reports 236
Miscellaneous Inquiries 263	Supplying Drugs to the Prisons 242
E litorial Notes:-	The Manchester Exhibition 244
The Pharmacy Bill 250	Trade Marks Applied for 243
The Report of the Board of In-	Trade Notes 242
land Revenue 251	" " from India 243
The Drug Trade in Mada-	Trade Report :-
gascar 252	London 256
Basear	20202

On page 244 will be found a further instalment of our report of the Manchester Exhibition, containing allusions to many of the principal pharmaceutical exhibits.

THE twenty-fourth meeting of the British Pharmaceutical Conference will open at Manchester with a reception on Monday evening next, and on Tuesday morning the President, Mr. S. R. Atkins, of Salisbury, will deliver the inaugural address. Then will follow the reading of the papers, the subjects of which, so far as they are at present promised, are referred to in an article we publish on page 253 of this issue. In that article we give a summary of the present condition of our knowledge of the subjects coming forward, and now await the new light which it is to be expected next week will shed on them. The report of the Formulary Committee, which we suppose will be submitted, is likely to be a feature of special interest. In our next number we shall report fully the events of the Conference.

THE reading cases which we offer to subscribers are new used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. sell these cases at the office for 1s., or by parcels post 1s. 3d., or two for 2s. 3d. We cannot forward them to any house for en-



closure, nor by any of the carriers, as in the latter case we

have to pay for booking.

## The Chemists und Druggists' Trade Association of Great Britain.

INCOME AND EXPENDITURE ACCOUNT, FROM APRIL 18 TO AUGUST 18, 1837.

$\ \ \ Receipts.$											
Balance brought fo	rward fro	m*last	acco	unt. vi	z. :—				£	s.	α.
Balance at L!		-				£	8.	,1			
Bank (Limite				-		236		4			
Balance in han							0	6			
Diffance in nan	ids of sect	cuary	٠	••	••			_	302	15	10
102 subscriptions at	t 5s									10	0
•		••			٠				4	15	6
Midlaud Counties C	'hemists' .	Associ	ation	, three	quart	ters' r	ent		3	15	0
Proceeds, sale of fu	rntture, l	ess cor	nmis	sion an	d exp	enscs			5	2	0
Cheque unpresente	ed since 18	380		••					0	6	0
Contributious by co	ommittee	to mal	ce up	deficie	ncy	• • •		••	. 34	4	11
									376	9	3
		70 -									
		Pa	yme	nis.					£	s.	d.
Advertisements									14		0
Auditors' charges f				•••		•••			21	0	0
Canvassing expense	-							•••	0	10	9
Hire of rooms for p			١	•••		٠.			3	13	6
Law costs, viz.:-			•			£	8.	d.			
Solicitors' char	ges			••	• •	10	6	2			
, trav	elling exp	enses				2	5	9			
						_		_	12	11	11
Office expenses, viz.						٥	7	0			
Cleaning		••	••	••	•••	_	15	-			
Gas Rates and taxe		••	••	••			15	4			
Rent		••	••		••	12		8			
nent	••	••	••	••	••			_	19	0	12
Postages										10	
Reporting									20	4	4
Salaries, viz.: -		-									
Secretary	••					50	0	0			
Assistant-sccre	tary					<b>3</b> 5	0	0			
Clerk	•••				• •	6	7	0			
						_			91	7	0
Stationery and prin	nting		••	••	••	••		••	37		0
Sundries		••	••	••	••	• •		••	8	. 9	0
Travelling expense	es, viz.:-						_				

We have examined the foregoing accounts with the books and vouchers of the Association, and find it correct. LAUNDY & Co., Chartered Accountants, Birmingham, August 18.

Executive committee

Secretary ..

PHARMACEUTICAL POLITICS IN ONTARIO.—The last election for the council of the Ontario College of Pharmacy tion for the country of the country of the seems to have stirred up more than the average proportion of strife. The election was declared on July 6. were twenty-nine candidates, and thirteen to be elected. Subsequent to the election certain of the defeated candidates have alleged improprieties in the manner of its conduct, and one of them, Mr. J. M. Pearin, of Toronto, has commenced an action against the president, Mr. Hervey, of Guelph, to recover \$2,000 damages for wrongfully depriving him of his office of member of the council of the Ontario College of Pharmacy, and to restrain Mr. Hervey and other members of the council elected on July 6 last from acting in the capacity of members of the College council, and to have the election declared null and void on the ground of alleged improprieties in connection with the election. The impropriety complained of is nnderstood to consist of the registrar opening the balloting envelopes and arranging them for the scrutineers' count. It was his usual custom, but it is broadly insinuated that the votes were tampered with. The plaintiff's solicitors, in order to get evidence of this, have sent out a new set of ballot papers, asking each voter to re-mark the list. They find considerable discrepancies between the results thus obtained and those officially declared.

## Metropolitan Reports.

Three Drops of Laudanum.—On Monday Mr. William Carter, coroner for East Surrey, held at inquest at Brixton on the body of Alice Maud Holland, aged one month, the illegitimate child of a domestic servant. The child was being brought up by a Mrs. Segar, who lives at 34 Mayall Road, Brixton, and who was to be paid 5s. a week. According to the statement of Mrs. Segar, the deceased on last Wednesday night appeared to have a slight attack of bronchitis, and having some laudanum in the house which she was in the habit of using for her toothache, she put three drops in the deceased's milk and gave it to her. The deceased fell into a deep sleep, and as she did not appear to wake up next morning Mrs. Segar became alarmed and called in a neighbour, and by the advice of the latter the deceased was taken to Dr. Clark's surgery and received medical treatment. The child, however, died the same night. The jury, after consulting in private for some time, returned a verdict of "Death by misadventure," and censured Mrs. Segar for administering the laudanum to the deceased.

LAUDANUM THE CONSOLER.—At the Hammersmith Police Court on Monday, Hugh Henry Friend, a carpenter, was charged on a warrant with attempting to commit suicide by swallowing a quantity of laudanum. On August 18, he entered the "Brewery" tavern, Goldhawk Road, and asked for a glass of water, and put down a halfpenny in payment, which the barmaid refused to accept. He poured something into the glass from a bottle and drank it. A customer remarked, "You have something good there?" He replied, "It is laudanum." He was followed, and information given to a police constable, who found him unconscious and hardly able to stand. He was then removed to the West London Hospital, where by treatment he recovered. He said he had been out of work for a long time, walking about the streets in a depressed state, and could endure it no longer. Inspector Roberts informed the magistrate that the poison was purchased at a shop in Goldhawk Road. Mr. Bennett said it was one of those cases which showed that there ought to be some further stringent power with respect to the sale of poisons. It was very careless to sell poison in that way to a stranger without inquiry. He remanded the prisoner, and accepted bail for his appearance to give him an opportunity of obtaining employment.

THE SUICIDE WITH OXALIC ACID.—The gentleman whose death by taking oxalic acid in the Parkhurst Road we reported last week, proved to be Mr. Henry Richard Shurmer, the "medical rubber," who had given to the late Mr. Hutton, the bone-setter, the bottle containing the poison. The inquest was held on August 18. The circumstances of his death were stated by the constable, Thomas Wilkins, who assisted him when he found him falling, and by Dr. Crabbe, of the Holloway Road, to whose surgery he was taken, and where he died. The widow said deceased was fifty eight years of age, and was formerly a horse-trainer, but had for some years been connected with Mr. Hutton, the celebrated bone-setter, who died very suddenly a short time ago. Deceased attended the inquest and gave evidence, and since then had become very irritable and strange in his manner. He had lost his employment, and complained of having no position in society. A few days ago he pulled a packet from his pocket, which he said contained two ounces of oxalic acid, and said he intended to take it. Believing that he was joking she took no notice except to ask him how he got it. He said from a chemist in Judd Street. The same afternoon she received information from the police that he was dead, and it was supposed he had taken poison. The death of Mr. Hutton had greatly upset him, and he had several times threatened to take his life. John Stevens, chemist, of Judd Street, said he sold the oxalic acid to deceased, as he said he wanted it to clean boots. It was properly labelled "Oxalic Acid—Poison." The Coroner remarked that deceased was the principal witness in the inquiry into the death of Mr. Hutton, to whom he had given the bottle which contained poison by mistake, and which caused Mr. Hutton's death. No doubt that circumstance, coupled with his being out of employment, had an effect on his mind. Ultimately the jury returned a verdict that deceased committed suicide, his mind being unsound at the time.

## Probincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

#### DURHAM.

THE LINIMENT IN MISTAKE.—An inquest was held on Monday on the body of John Hughes, Cement Row, Dubmire, cokedrawer, who died on Saturday morning after having taken a dose of poisonous liniment in mistake for cough elixir. Maria Hughes, wife of deceased, stated they both arose about 3.15 a.m. on Saturday morning and came downstairs, when her husband asked her to get the liniment to rub his back. After doing so she put it carefully away in a corner of one of the pantry shelves. Her husband, a short while after, went in for his cough mixture, and poured himself a teaspoonful and a half in a wineglassful of cold water, and drank it. He immediately cried out, "Oh, Maria, I have taken the liniment." She went for Dr. McGree, who, on his arrival, ascertained that the liniment contained aconite. He gave deceased two emetics, which appeared to produce recovery almost to convalescence, and the doctor left. A neighbour took the deceased out for a walk, and the latter fell twice. The second time he expired almost immediately. The jury returned a verdict of death from accidental poisoning.

#### HARTLEPOOL.

DEATH FROM CHLORAL HYDRATE.—Mr. Thomas Alderson, a solicitor's clerk, about 60 years of age, was found dead in bed on Tuesday, with a bottle containing a small quantity of chloral hydrate on a table by the side of the bed.

#### LIVERPOOL.

THE Annual Congress of Homocopathic Practitioners will be held this year in Liverpool, at the new Hahnemann Hospital, Hope Street, on Thursday, September 22, at 10 A.M. punctually. The President, Dr. A. C. Clifton, of Northampton, will open the proceedings by an address on "Therapeutic Changes in the Victorian Era; their Meaning and Lessons for Homocopaths." Any strangers who may desire to hear the President's address will be welcome. Papers will also be read by Dr. John Davey Hayward, of Liverpool, entitled "The Use of Drugs in Surgical Cases;" by Dr. Prector, of Liverpool, entitled "Some Practical Observations on Ammonia;" and by Dr. Percy Wilde, of Bath, on "The Elimination of Sectarianism from Medical Science." Afterwards the Congress will resume the discussion on Dr. Galley Blackley's paper, entitled "Doctors and Chemists," which was read at Norwich in 1885. It was then resolved to adjourn the discussion on this paper till the present Congress in order that the views of chemists should be heard. A deputation from the Homœopathic Pharmaceutical Society has been invited to be present, and to express their views. The Congress will be happy to receive and hear the opinions of any homocopathic chemists, other than the deputation, who may desire to attend during the day's proceedings. There will be a dinner of the Society and friends at the Adelphi Hotel, Ranelagh Place, at 7 o'clock. On the following day, Friday, September 23, the new Hahnemann. Hospital will be formally opened.

#### NEWCASTLE.

STARCH AND FANCY.—The Manchester *Umpire* says:—A Newcastle man swallowed a large dose of Colman's starch the other day which a suspicious druggist prepared for him in place of the strychnine he asked for. The miserable man swooned, and was soon stretched upon his bed cold and stiff. No one but must sympathise with the unhappy wretch's despair when he shortly awoke to find himself still in Newcastle, and, as the account cruelly puts it, "with his wife bending over him." She probably took the starch out of him.

#### PLYMOUTH.

SUICIDE OF A HOSPITAL PATIENT.—An inquest was held on August 16 concerning the death of Elizabeth Glenn, who had heen a patient in the Royal Albert Hospital. She had suffered from abscess in the bowels, hut the surgeon who attended her said she was on the way to recovery and she was to be removed to a convalescent home. She had heen quiet but depressed, and at times had expressed a wish to he dead. The evidence went to show that she had obtained a box containing sleeping-pills, half grain of opium in each, from another patient in the ward, and had taken all there were in the hox, and that she had also taken some solution of morphia and atropia which had heen left ahout. coroner commented strongly on the system of leaving dangerous medicines ahout in the wards. He thought medicine should he brought round when it was to be administerd. Dr. Perks said this system would lead to confusion, as there would be a possibility of the medicines being mixed. This system had worked satisfactorily before, and he considered it the smaller of two risks. The Coroner: Something ought to he done. We are not like the Chinese, who are averse to changes, and by the light of experience some other plan might be thought of. Dr. Perks said the subject had often been discussed, hut no better plan had been suggested. The Coroner: Why could not each patient's medicine he placed in a locked box over each patient's hed and the nurse have the key? Witness admitted that that plan would, of course, he much safer. The coroner afterwards drew the attention of witness to the provisions of the law, which prevented the free sale of poisons, and asked, in view of this fact, if he did not consider that precautions ought to he taken to prevent patients from getting such poison in the hospital. Dr. Perks said there was supposed to be proper night supervision, and the night nurse was supposed to he in the ward for that purpose. In the necessary absence of the nurse from the ward for a few minutes it would have heen possible for deceased to have got the poison. The mixture in the bottle had heen kept on a table in the ward as a matter of convenience, as it was often used for injection. The jury returned a verdict of "Temporary insanity."

#### PRESTON.

FATAL OVERDOSE OF LAUDANUM.—On August 22 an inquest was held at the Rosebud Inn, Preston, on the hody of Alice Barton, aged sixty-nine, who died on August 19 from an overdose of laudanum. Deceased was in the habit of taking laudanum to induce sleep, and took rather more than usual on Friday. The jury returned a verdict of "Death by misadventure."

#### SHEFFIELD.

TAKING INSECT POWDER.—A middle aged woman named Sarah Goddard was charged on August 23, hefore the stipendiary, with attempting to commit suicide on August 17. She was taken to the hospital on that date hy a man who stated that she had poisoned herself with a threepenny packet of insect powder. The stomach-pump and other remedies were applied. She was at the time in a very low mental condition. She had been an inmate of the hospital ever since. It appeared that she went to the Norfolk Arms Hotel about noon, and had twopennyworth of whisky. Shortly afterwards she fell on the floor, and he accused her of being drunk. This she denied, and remained in the house till nearly five o'clock, when he again accused her of being drunk, and she replied that she was not drunk. She then told him she had taken poison, and he would find the paper under the seat. He looked there, and found the paper produced. woman was remanded, and taken back to the hospital.

A DANGER SIGNAL.—The following advertisement is appearing in the local papers:—

"CAUTION.—All drugs are poisonous more or less. Serious and dangerous results often occur by inexperienced persons purchasing adulterated and inferior drugs from unskilful dealers. All drugs used for medicinal purposes ought to be of the standard quality approved by the British Pharmacopæia. Drugs sold at the establishment of J. M. Furness, late Maleham & Son, 7 West Bar, have this important guarantee."

PINK POWDERS .- On Tuesday an inquest was held at Wath-on-Dewine, before Mr. Dossy Wightman, coroner, on the body of Joseph Redfern, aged nine years, son of Charles Redfern. The mother of the deceased, said her son had heen rather delicate, and on Friday she thought it needful to send for a doctor, but the medical man did not arrive until after the death of the child, which occurred on Saturday night. The doctor then examined the child, and said a vein had hroken on its hrain. The child had not had any fall that she knew of. It was taken seriously ill on Friday night, and was unconscious afterwards. At first they thought the child was suffering from cold. On Saturday morning she gave the child a pink powder, which she got from Mr. Hick, chemist. She sent for a powder for a child ten years of age. The child vomited almost immediately after taking it. This was the eldest of her three children. The deceased was insured in the Refuge Friendly Society. After some similar evidence from the sister of the last witness, the Coroner said he thought there was no need for a post-mortem examination. The Foreman said he thought not, except from what had appeared in the Evening Star as to accidental poisoning. A Juryman: It was very different in the Telegraph. The Coroner: I would not believe either of them. (Laughter). Fred Finney, assistant to Mr. Hick, chemist, was called by desire of the jury, and spoke as to the sa'e of pink powders. They are to be used in cases of fever. Instructions were written on the powders. The powders are ready made, and are prepared according to the age of the children. By the Coroner: I helieve there is no foundation for the report that the child was accidentally poisoned? There was not sufficient in the powder to do it. The Coroner, after questioning the witness at some length, expressed the opinion that there were no symptoms whatever of poisoning in the case. A verdict was returned to the effect that the child had "died suddenly from natural causes, probably the bursting of a hlood-vessel on the brain."

#### ST. HELENS.

CARBOLIC ACID POISONING.—On Tuesday, about half-past six o'clock, a man named Alexander Lockhait entered the shop of Mr. Samuel Wilson, chemist and druggist, Duke Street, St. Helens, and asked for three pennyworth of carholic acid. This was supplied by an assistant, and Lockhart left the shop. Immediately on getting outside the door he was seen to raise the hottle to his lips and swallow a large portion of the liquid. He called out, "I've poisoned myself," and several persons, including his mother, who lives at 7 Barton Street, a short distance from Mr. Wilson's shop, ran to his assistance. The man was removed to his mother's home, and Dr. Marsh was sent for. The doctor arrived quickly, but Lockhart was past all help, and, after suffering much pain, he expired half an hour afterwards. The deceased was twenty-six years of age, and was employed as a glassmaker. For three weeks past Lockhart had been drinking heavily, and had just been served with a summons for assaulting a woman with whom he had been living.

#### WAKEFIELD.

AN INTERESTING WEDDING.—Much interest was manifested in Wakefield, last week, on the occasion of the marriage of the almost octagenarian chemist, Mr. George Emanuel Smith, of St. John's, with a young lady of twenty summers, Miss Sarah Lizzie Agnes Catherine Douglas. The wedding took place at the church in the little village of Kirkthorpe, in the presence of a crowded congregation.

#### SCOTLAND.

#### EDINBURGH.

THE SALE OF METHYLATED SPIRITS.—The proposed provision in the new Revenue Bill, to prohibit the sale of methylated spirits hetween ten o'clock on Saturday night and eight on Monday morning, will not he looked upon with much disfavour by chemists in certain quarters. This article is frequently asked for on Sundays, and in many cases it is only too obvious for what purpose it is wanted, although the request for it is generally accompanied by a voluntary explanation—a suspicious thing in itself—that it

is required to rub a horse's knees, or for a polisher who has unexpectedly received notice to start early on Monday morning to work in the country. Such purchasers do not commonly possess infallible memories, or perhaps they attach too much importance to the guileless character of chemists; for it not unfrequently happens that the same person professes to be in the furniture trade one Sunday, while the next he is a horse doctor. If it be desired to determine the precise "purpose for which it is required," in such cases a little soluble essence of cap-icum judiciously added generally produces at next visit the remark that the last surely had "something in it."

Refusing to supply a customer is an unpleasant thing, even when there are restrictions on the article wanted, but it is doubly so when the purchaser knows that the only impediment to his getting it is the seller's unwillingness. It is not uncommon for the chemist's refusal to supply methylated spirit on a Sunday to be met with the remark that if he won't oblige a customer on a Sunday he won't get the chance to supply him on other days. If the transaction were made distinctly illegal a source of frequent annoyance would be removed. Possibly a clause could be inserted to provide for supplying the spirit for undoubtedly legitimate purposes.

SALE OF COLOURED FIRE—Two prosecutions of considerable importance to chemists took place in the Sheriff Court on Monday last. Thomas George Stoddart, of the firm of Kemp & Co., Infirmary Street, was charged, under the Explosives Act, 1875, with having had, on June 20 last, 5 lbs. of coloured fire on his premises. He pleaded guilty, and his agent stated that he was not aware that an innocent material like coloured fire could be described as an explosive. It had been carefully kept apart in a tin box. The Sheriff (Sym) said that coloured fire was included in the Explosives Act, but as the offence was a trivial one he would inflict a nominal penalty of 2s. 6d. William Hume, Lothian Street, pleaded guilty to a similar offence, remarking that he was ignorant of the fact that the Act embraced coloured fire. The Sheriff imposed the same penalty as in the case of Mr. Stoddart, and remarked that it was an error to suppose that the police should make dealers aware of the law on the subject.

Messrs. Kemp & Co. are dea'ers in photographic chemicals and philosophical instruments; they also carry on a chemist and druggist business. Mr. Hume confines his business to chemicals and scientific apparatus.

It is plainly stated in the Explosives Act, 1875, that the term "explosive" includes, besides gunpowder and its kindred, "coloured fires and every other substance, whether similar to those above mentioned or not, used or manufactured with a view to procure a practical effect by explosion or a pyrotechnic effect." Section 73 of the Act provides for "any Government inspector, or any constable, or any officer of the local authority," being authorised "to enter at any time, and if needs be by force, as well on Sundays as on other days," any place where there is "reasonable cause to believe that an offence has been or is being committed with respect to an explosive," and to search for explosives or ingredients used in their manufacture.

It will be well for the chemist to bear this in mind at any time when the juvenile Britisher endeavours to inveigle him into giving his assistance to produce a "practical effect" in the pyrotechnic line.

#### SELKIRK.

A CORRESPONDENT writes:—"The 'Hessian fly' has penetrated to our mountain fastness, and is playing havoc with our 'crops.' Cutting is now pretty general. Like Mark Tapley, we are trying to feel jolly under difficulties, and are quite prepared to enjoy the fun of selling patents for nothing."

CHILIAN BORAX.—From some analyses made by Señor Emil Eisele, of Valparaiso, and by Mr. J. Clark, of London, of several samples of crude Chilian borax, it would appear that Chili is capable of producing at least as good borax as California, the quality being equal to a good deal of that which comes from Italy. The attempts which are being made to open up a borax industry in Chili would therefore seem likely to prove successful.

#### FRENCH PHARMACEUTICAL NEWS.

#### (From our Paris Correspondent.)

CHEAP VITRIOL.—It is reported that the Rio Tinto Company, a corporation controlling important pyrites mines, are setting up sulphuric acid works at Estagne, near Marseilles, where they will sell the acid at the rate of 3f. 50c. 100 kilos., or about 17d. a cwt., cheap enough to vitriol the whole universe.

THE RETIRING OF NAVY PHARMACISTS.—By ministerial order, navy pharmacists will henceforth go on the retiring list at the following ages:—Directors, at sixty-five; pharmacists-in-chief, sixty-two; pharmacists-principal, fifty-eight; and pharmacists of the first and second class, fifty-six. Navy physicians of the same classes are to be governed by the same rules, the grades being equivalent in both branches of the medical service.

Chloride of Calcium for the Fruitery.—To keep the fruit-loft dry, without the openings or draughts which may let in sunlight or cold air, French fruit dealers now use chloride of calcium to absorb the moisture necessarily condensing in a closc room. The operation is most simple, the chloride being spread on a wooden tray lined with lead, and provided with a drain. About 20 kilos of chloride of calcium, used in three doses, is sufficient for a room of 60 cubic metres holding 8,000 small fruits. The deliquesced chloride of calcium is collected, and may be evaporated to dryness for another year's use, or returned to the chemist, who will attend to the operation.

CLAIRVOYANTS AS PHARMACISTS.—The other day Mme. Claudia, calling herself the most sensitive of somnambulists, and "Dr." Antonio appeared before the St. Etienne Correctional Tribunal, charged with having unlawfully practised medicine and pharmacy. The man said his medicines had never hurt anyone, but cured many patients. As for the appellation "Dr." used before his name, he pleaded that meant "director," as M. Carvalho called himself the director of Mme. Van Zandt, or one might style himself the director of a menagerie. The explanation being found unsatisfactory, Mme. Claudia was sentenced to 50 francs and "Dr." Antonio to 100 francs fine.

TRICKS OF MORPHINE EATERS.—The other day a boy, some thirteen years old, presented to a pharmacist of the Rue Poissonnière a prescription for a considerable dose of morphine, together with a note, signed by a well-known physician of the Rue Cambacérès, in which the doctor said he needed that quantity at once. He added he was attending a patient who was dangerously sick, and he would settle with the pharmacist directly on leaving the man's bedside. Somehow mistrust was aroused, and the morphine was refused, after the boy had been made to give his address. On his leaving he was followed, and as he was taking a direction opposite to the address he had given he was arrested. Then he confessed he had been sent by his father, a morphinomaniac, living in Neuilly, who pretends to be a journalist. Many pharmacists, it turns out, have been victimised in the same manner, and for some time the physician has been receiving a number of bills for morphine thus supplied on his forged signature.

The Beer-brewing Exposition.—Owing to the impossibility of disposing before September 1 of the Ville de Paris Pavilion, the opening of the brewing exposition, in which chemists take no little interest, has been postponed to September 15. Some of the official regulations just published are quite characteristic. The exhibitors, for instance, are to be allowed to retail beer to the public for dégustation purposes; but all the stands shall be alike, and so shall be the glasses and even the prices, which are fixed beforehand. Moreover, no seats of any sort shall be allowed before the stands, and only men shall be permitted to dispense the beverage. This last regulation may be intended to ensure perfect equality between the contestants, as too attractive a barmaid might influence consumers in their judgment. But it may be also that a feeling of public decency has caused this exclusion of females, for Paris "filles de brasserie" have a most unsavoury reputation, and deserve it.

### COMPETITION No. 11.

#### DISPENSING LABELS.

WE have received a number of letters from subscribers regarding this competition, in which various labels are selected for commendation and others for condemnation. One correspondent's idea is that "the written lines of a label should be the largest possible. Upright labels are objectionable, though they certainly are an advantage where direct square bottles are in use, the label being readable without having to move the bottle three times during the reading of each line. There is nothing," he says, "like the oval bottle, and the saving in breakage is very great." Hc considers the type-writer a good idea, and suggests that medical men should write their prescriptions with such machines. That, we may say, is done by a few physicians who have consulting practices; but we cannot hope that those who have a few dozen patients to visit every day would carry a type-writing machine about with them. Mr. J. J. O. Evans (Teignmouth), in a critical note, comments on the labels with adventitious matter on them, and submits one of his own, a part of which we reproduce :-



The label has the name and address at the top, which is

Messrs. Reid & Orchard (Salisbury) have a series of oblong labels with a similar caution placed on the top, like this:

THE DOSES ARE MARKED AT BACK OF BOTTLE.

These directions entail either bottles with moulded marks (which are generally incorrect) or graduation by hand. It is much better to encourage the use of graduated measures by patients. Procter's measures, for example, are inexpensive and accurate. A separate label placed under the shoulder of the bottle forcibly draws attention to the matter of measurement. Such a label as the following, printed in red ink, catches the eye well, but it might be better without the word "Caution," which would frighten some people:—

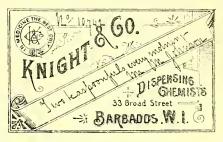
#### CAUTION.

This Mixture should be carefully measured. The Bottle contains 12 doses.

In the reproductions on the next page there are a number of good examples of labels, with provision for register numbers and the like. Mr. W. T. Oldham's label is a useful one in establishments where the prescriptions of different doctors are kept on separate files. Messengers frequently are unaware who the prescriber may be; but if such labels be used the dispenser is independent of other people's memories. Messrs.

H. Long & Sons' label is one of a series; the point in it is the blanks for initials. A separate label is generally used for this purpose, and is placed on the back of the bottle. Some principals prefer not to show customers who has dispensed the medicine, so that the delegation of important duties to subordinates may not be made apparent, and there is something to be said for the wisdom of this. Moreover, some people like their medicine to be always dispensed by the same individual—the initials show a change. A check can be kept on dispensers by having a book at the dispensary counter, in which the dispenser enters the name of the patient, the nature of the medicine, time dispensed and sent out, &c.; he places his initials in one column and the checkermakes his mark in another. This and similar plans are followed in several large establishments, and they seem to work well.

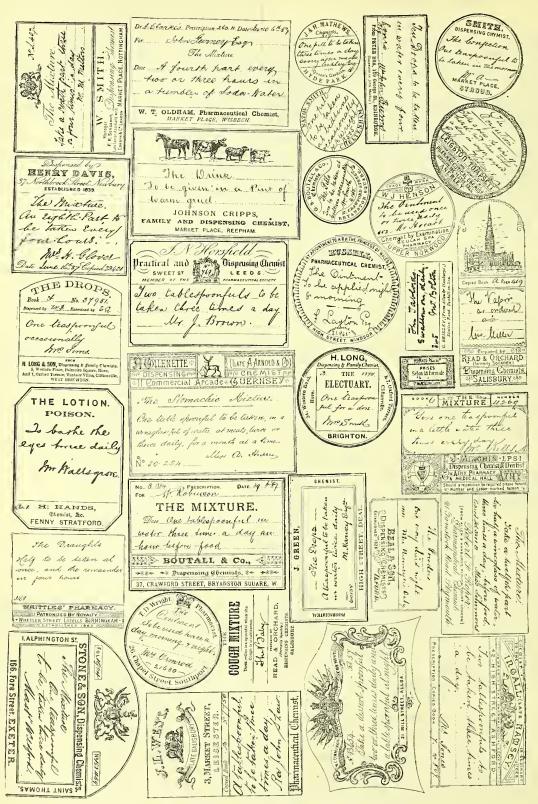
We have received the following novel label from a West Indian chemist. Mr. W. Julian Knight, the designer of the label, informs us that the firm have three sizes, the largest  $3\frac{1}{8}$  in.,  $2\frac{1}{8}$  in., and the smallest as shown. He rightly points



out that the label is open to criticism owing to the too narrow writing space; but against that he places the prominence which is given to the name and address, which cannot fail to act as a good advertisement. A slight alteration would give more blank space without affecting this character of the label to a serious extent. We have seen similar labels for put-up preparations and toilet articles. Labels which are unusual in appearance generally attract marked attention—for a time, at least. The diagonal label given below is intended for cone-



shaped drop bottles, but we observe that the same shape is adopted by others for liniment and lotion labels. Of what are known as "poison blanks" we have received a large variety, but as these are nearly all printed in colours we cannot reproduce All preparations for top cal application should be labelled with labels perfectly distinct from those used for internal remedies. This is an almost universally accepted rule. Few adopt plain white paper and black ink. Mr. Hands is one of those. His lotion label is quite distinctive on a blue ribbed poison bottle, but it would be a better label if it were printed on toned paper, say yellow, or if the word "poison" were printed in crimson. Yellow paper has rather a pleasant appearance, especially if it be glazed; it is better than green, although there is this to be said for the latter, that it is more distinctive. In this respect nothing equals the orange-coloured paper, the only objection to which is that when soiled with oily liniments the directions are difficult to read. There are several shades of crange; the pale, however, takes the palm for distinctiveness; the printing on this shade appears as if it were thrown out in relief, and the same applies to the writing if done with a good black ink. Other papers of a red shade are used, and of these the pink or pale claret are the



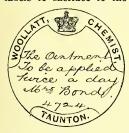
HALF-SIZE REPRODUCTIONS OF DISPENSING LABELS,

best, but they do not equal the orange. Dark crimson paper is decidedly objectionable, the printing and writing upon it

being exceedingly faint.

White paper labels with coloured ink lettering are by no means uncommon. Crimson lettering is more distinctive than the pale red, and if instead of red rules bold black ones are used the labels become as striking as anyone could wish. Mr. T. J. McAdam (Omagh) has a series printed in this manner. An excellent style of label is that with crimson and black ink on a white ground. The blank space is white, the name is in white letters above on a crimson ground; immediately below, and also above the blank space, such words as "poison," "not to be taken," &c., are in white letters on black ground, and at the bottom is the address in the same style as the name. The margin is composed of white, black, and crimson lines, the latter outermost. The position of the name, address, and caution words may vary, but the effect on the whole is very good, and there is not the objection to these labels which there is to those printed on orange paper.

A number of round labels are given to-day, and together with those which were previously printed fairly represent the various styles which are in use. There is no space on round labels to sacrifice to the printer. Recognising this, many



have their designation printed in a circle as a margin, and others adopt the style of Mr. Woollatt. The same style without the crown is shown in Mr. Nathaniel Smith's label. This simplicity of wording should be observed as far as possible in order to save space. The surname and title in two lines above, and the address in one or two lines below (as adopted by Mr. Smith, of Stroud),

are all that is necessary to indicate where the medicine has been dispensed. The want of a rule is not apparent until the blank space is filled up; then there is a tendency for the writing and printing to run together, an objection which such labels as Mr. Woollatt's do not have. Straight rules are most used, but oval ones are better, and give more space. Powder envelopes are to a large extent a repetition of dispensing labels, but a little care may be used in selecting a style. For example, we observe the following style of margin

Me Misclure —

One tablespoonful to be laken in a wineglassful of water three times a day.

No. 5013

PHARIJACEUTICAL AND DISPENSING CHEMIST PHARIJACEUTICAL AND DISPENSING CHEMIST DISPENSION CHEMIST DISP

used by some. This is very nice when it is trimmed and placed on a bottle, but it looks decidedly clumsy on a powder envelope. Another point is that the ruled margin should be as near the edge of the envelope as possible; unequal blank spaces at each side do not look well. This may be avoided by omitting the ruled margin and having the print in script form. Mr. N. M. Grose (Swansea) sends a pill envelope, an adjunct to the dispensing department which may be new to some. It is an envelope  $3\frac{1}{4}$  inches long by 3 inches deep. "The pills" is printed on the top within a two faint-line margin; the name and address at the bottom in the style of the labels printed on page 117, but with "Castle Street, Swansea," in one line. The dispensing envelope of the same chemist has the printing at each side, so that the top of it is the left side, although the flap is in the usual position. Mr. George Stocker (Exeter) has a wonderful arrangement of chemical apparatus and designation in a small enclosed space of the left top corner of the envelope. The flap is fanciful, and is full of printed matter on each side. The flaps appear to be

well utilised by a good proportion of those who have contributed specimens. In most cases notices of free delivery, quick dispatch, and the like are given, with occasionally an advertisement. Some have such a notice as this, which would be better on a bottle:—

CAUTION!—WHEN MEDICINES ARE ORDERED TO BE TAKEN BY SPOONFULS A GRADUATED GLASS MEASURE SHOULD BE USED IN ORDER TO INSURE THE CORRECT DOSE.

The night bell—that encourager of late customers and reputed refuge for benighted store patrons—receives a large share of attention. Others relegate this also to the bottle, by using a label like the following:—

Medicines can be prefared at any hour of the night, or on Sundays, in cases of emergency, at the Branch—CHURCH VIEW, BOWDON. Hours of attendance, on Sundays or Holidays:—

From 9-30 to 12-30. ,, 2-30 to 4-30. ,, 6-30 to 10.

On the whole the envelopes without ruled margin and adventitious matter, and with the name printed in quiet style, are the most attractive.

The penmanship exhibited by competitors is, on the whole, fairly satisfactory, but it is as well to mention that the worst specimens have been excluded. There are many carefully-written labels, especially by juniors, who are still in the transition state and combine the school form with care in distribution of the wording. Such a label as that written by Mr. A. Ekins, jun., though somewhat cramped, is remarkably distinct. Others of a like character might be mentioned, but our list would run to too great length. Mr. F. Smith, care of Mr. Green, 196 High Street, Deal, has sent several labels, all of which are written with uniform care and boldness of style. His original design for a dispensing blank, which is reprinted here, shows well the character of his penmanship. To him we award the guinea prize, and give the position of proxime accessit to Mr. A. Allen, care of Mr. D. Smith, Stroud, with an extra prize of half a guinea.

## Personalities.

MR. PAUL WARDROPER, of Cullercoats, Tynemouth, inrenewing his subscription this week adds: "I am one of the oldest druggists in business in the kingdom, having been apprenticed in the year 1817." We shall be glad to hear from anyone who can beat that record.

A DRUGGIST KNIGHTED.—Among the gentlemen who were selected for honours in connection with Her Majesty's Jubilee, a member of the drug trade, Mr. James H. Haslett, druggist, of Belfast, has received the honour of knighthood. Sir James was member of Parliament for the West Division of Belfast during the last Parliament, but at the last general election was defeated by Mr. Sexton. Sir James was entertained at luncheon by the Lord Lieutenant on Monday.

EARNINGS OF AMERICAN DOCTORS.—The Irish Echo, of Boston, Massachusetts, gives the following figures as representing the annual income of eight of the principal physicians and surgeons in New York:—Dr. Fordyce Barker probably makes the largest income of any New York physician. His reputation as a consulting physician stands very high. He is said to make from \$50,000 to \$60,000 each year. Dr. A. L. Loomis, a specialist on threat and lung troubles, makes about \$50,000. Dr. J. Metcalf makes about the same amount. Dr. L. A. Sayre, the great surgeon who mended John L. Sullivan's broken arm, makes \$30,000. Dr. A. Jacobi, whodevotes himself entirely to diseases of children, makes \$30,000. Dr. C. R. Agnew, who makes the eye a specialty, clears \$25,000 yearly. Dr. George T. Shrady, who attended General Grant so faithfully, has an income of \$25,000. Dr. Herman Knapp, an eye specialist, receives about \$25,000.

#### SUPPLYING DRUGS TO THE PRISONS.

IN the House of Commons on Monday last, in committee of supply on the vote for the cost of the Material's supply on the vote for the cost of the Metropolitan Police, a discussion was raised respecting the supply of

medicines to the prisons.

Mr. Picton said he wished to call attention to one item of this vote, and to move the reduction of a small amount. The smallness of the amount, however, was quite consistent with the great importance of the principle which was at stake. It was nothing less than the fairness with which contracts were given cut. He had no complaint to make against the present Government, inasmuch as the incidents to which he had to allude took place before they were in office. Last year an advertisement appeared asking for tenders for the supply of drugs to Her Majesty's prisons. The old-established firm of Richardson & Co., of Leicester, sent in a tender which was not accepted, but they ascertained that the successful tender was offered at prices  $7\frac{1}{2}$  per cent. above what they had offered. The Home Secretary, in answer to a question on that subject, had said that the prison authorities had a right to secure the purest drugs. That was very true, but the firm to which he referred was quite as capable of supplying the purest drugs as any other firm in the country. In support of this assertion the hon member quoted the authority of a surgeon of the London Hospital, to which institution the firm in question supplied drugs, and he said that he had also 31 testimonials of a similar character from medical men of excellent positions in all parts of the United Kingdom. (Laughter.) No sufficient reason had, therefore, been given for declining to accept the tender of a highly respectable firm which was considerably lower than the tender that was accepted, and it was natural to suspect that some favouritism had been exercised in that case, which ought to be jea'ously watched and guarded -against. The hon gentleman concluded by moving the reduction of item G (medicines) by 95%.

Mr. Stuart-Wortley thought they would sympathise with the then. member in acting as the champion of his constituents on that occasion. (A laugh.) But the question involved in the proposed reduction of the vote was whether, when tenders were invited, they should have regard merely to price and not to quality. A system of limited tender was preferable to one of open tender in some cases, and a wise discretion had to be used. In regard to drugs quality was a matter of supreme importance, and it was better, perhaps, to resort to the system of limited tender in respect to them. It had been intended, before the hon, member gave notice of his amendment, to see whether in future it would not be advisable to

proceed on that principle.

Mr. H. Fowler remarked that the Prison Commissioners had invited public competition and open tenders, and even if it were thought wise to adopt the system of limited tender in future, they could not go back upon what had been done rankess it could be shown that the firm mentioned by the hon. member for Leicester was incompetent to supply pure drugs, aud they were bound to accept the lowest tender. Was the tender that was accepted that of persons who were previously in the habit of having the contract?

Mr. Stuart-Wortley would be happy to answer that question

if the right hon, gentleman gave notice of it.

Mr. H. Fowler said if the Home Office could not answer he

would say nothing more.

Mr. Matthews said that the responsibility of the Home Office for the acts of the Prison Commissioners must be limited to the period within which the Ministry has been in power. Certainly the Minister of the day was not responsible for what the Prison Commissioners did under the rule of the Government of which the right hon. gentleman was himself a member (hear, hear), and the right hon. gentleman should address his question to a former Home Secretary. (Hear, hear.)

Mr. H. Fowler said that the Home Secretary had favoured him with a reproof which he accepted with all humility, but he ventured to tell him that he had completely misapprehended the constitutional position of Ministers in that House with respect to the Estimates. (Hear, hear.) The Home Office and the Government of the day, representing the Prison Commissioners, were bound to furnish the House with all information with reference to the votes on their account. The question was not sprung on the Government,

as the hon. member's motion had been down on the paper for two or three months. He did not charge the Home Secretary with any responsibility—it would be absurd to charge him or his predecessors with responsibility—but in voting money for the Prison Commissioners they wished to know whether the money had been fairly spent. The Prison Commissioners were a permanent body and the Home Office was the responsible medium through which they communicated with the House. The fact was before the Committee that at an open tender by public advertisement a firm certified to be competent to discharge the duty by one of the most eminent medical men in London tendered for 95l. less than the firm whose tender was accepted. The Committee was entitled to some better explanation of that circumstance than had yet been given.

Mr. Lafone remarked that it was not necessary for the lowest tender to be accepted. It was usual to advertise that neither the lowest nor any tender would necessarily be accepted.

Dr. Clark observed that it was easy in the case of drugs to test by analysis whether they were of the proper quality.

Mr. M'Arthur thought that the hon, member who had brought forward this motion had discharged a public duty. He believed there were many such cases.

Dr. Tanner contended that the committee was entitled to some better explanation than had yet been given on this

Sir. E. Reed hoped that the hon, member would not go to a division on the motion.

Mr. Picton remarked that it had been insinuated again and again that there had been something defective in the drugs furnished by the firm in question. There was no evidence of this whatever. They had furnished drugs to many hospitals in different towns, and he thought that it was a very hard thing that their tender should not have been taken. In these circumstances he declined to withdraw his amendment,

Mr. Woodall thought that the Government might give the reasons why this tender had not been accepted.

Mr. Labouchere suggested that the Government might make a statement with regard to the matter upon the report of Supply, as they admittedly did not quite know the facts of the case. He would also suggest that samples of the drugs might be placed in the tea-room. (Laughter.)

The committee divided, and the numbers were-

... 34 For the reduction ... 114 Against ... • • • Majority against

## Trade Hotes.

STENCIL-PLATES .- Mr. M. Linder, of 170 Fleet Street, E.C., offers excellent and cheap sets of stencil-plates, which are constructed in such a manner that the letters fit into each other so as to form words. Chemists will find these very useful for making labels for store packages, and for other purposes.

THE directors of Messrs. Sadler & Co. (Limited), chemical manufacturers, Middlesborough and elsewhere, have issued their report and balance sheet for the year ending June 30, 1887. The year's work shows a gross profit of 10,213l., which, after deducting interest charges, directors' and auditors' fees, and depreciation, leaves a net profit of

PAPAIN FINKLER.-Mr. B. Kühn, of 36 St. Mary-at-Hill, the special agent for this product, has shown us that in a note published in this journal on July 30 we inadvertently misrepresented the effect of the comparative experiments with papain and pepsine reported in a paper by Dr. Finkler in the Lancet. Those experiments went to prove that the peculiar property of Papain Finkler is that it acts most energetically in concentrated fluids. This result is very important, as the condition indicated corresponds with the ordinary circumstances in which digestion is effected.



#### EUCALINUM,

MESSRS. ROCKE, TOMPSITT & Co. have hit upon a capital idea in combining various products of the eucalyptus with crushed linseed, the compound heing intended as a poultice basis. The leaves, seed, and oil of the eucalyptus are used, so that eucalinum possesses the powerful antiseptic properties of the plant in a practically unimpaired state. The preparation makes an excellent poultice, which is specially adapted for allaying inflammation and relieving pain, virtues which, in many cases, an ordinary poultice does not possess. Eucalinum is put up in an attractive style, and the manufacturers make a special offer of a quantity of sample tins for distribution to chemists who are willing to introduce the specialty. This offer is contained in an advertisement in this journal, and is well worth attention. Messrs. Chas. Green & Co., Tower Chambers, Moorgate Street, E.C., are the agents for England.

#### TRADE-MARKS APPLIED FOR.

THE Trade Marks Journal publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, withiu two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings. London, W.O.

- "SOBRENE," and other wording, on lahel; for an aërated non-alcoholic heverage. By J. W. Whitehead (trading as Whitehead & Co.), 83 Bloomshury, Oxford Street, Manchester. 61,060.
- "Melrosa"; for a preparation for the hair (Classes 3 and 48). By S. R. Van Duzer & Son, Southampton Row, Bloomshury, W.C. 61,602 and 61,604.
- "FRY'S PRIZE MEDAL HONEY BEVERAGES," other wording and figures of medals, on label; for aërated beverages. By S. Fry, chemist and druggist, Bishop's Waltham. 61,648.
- "THE 'SPEEDY' NEURALGIC CURE," and other wording, on label; for a medicine. By J. Palmer & Sons, grocers, Balham, Surrey. 61,728.
- "APIFUGE ET INSECTIFUGE"; for a drug for human use. By R. A. H. Grimshaw, commercial traveller, 5 Crag Terrace, Horsford, near Leeds. 62,516.
- "LEARMOUNT'S NEURALGIAC"; for a patent medicine. By W. D. Learmount, bookseller, 75 King Street, South Shields. 62,605.
- "VETERINE"; for a healing lotion for animals. By H. Bell, chemist and druggist, 62 Quay, Waterford. 62,926.
- "SADLER'S MUSTARD," and figure of a beef-eater, on round label; for a preparation of mustard-oil. By A. Finch and A. Ashley (trading as Sadler, Firth, & Ross), mustard manufacturers, 26 Great Guildford Street, S.E. 63,720.
- "SOUTHALL'S GERMICIDE OR GERM DESTROYER"; for disinfectants. By Southall Bros. & Barclay, Birmingham. 63.845.
- "GANTINE"; for a preparation for cleaning gloves. By J. Taylor, Cooper Street, Manchester. 63,961.
- "ZAPON"; for lacquers and vainishes. By The Frederick Crane Chemical Company, 433 Strand, W.C. 64,248.
- "SULPHALUMINE," and signature; for a chemical substance By P. Spence & Sons, Manchester and Goole. 65,283.

## NEW COMPANIES.

\* THE BASIC PHOSPHATE COMPANY (LIMITED) — Capital, 10,000l., in 50l. shares. The company proposes to adopt an agreement made with the Carlton Iron Company (Limited), to carry on the husiness of crushers of slag and other minerals and materials, manufacturers of chemical and other manure, iron and steel, colliery proprietors, coke manufacturers, &c.

BRITISH ULTRAMARINE MANUFACTURING COMPANY (LIMITED).—Capital, 7,500*l*. in shares of 1*l*. each. This company proposes to manufacture and sell ultramarine and other compounds, and to purchase and acquire patents and inventions and other properties of Léon Jean Baptiste and Francois Joseph Bouillet.

NEW CAMBRIAN CHEMICAL COMPANY (LIMITED)—Capital, 10,000%, in shares of 1% each. The company proposes to purchase and carry on the husiness of the Cambrian Chemical Company, including the chemical works situate in the parish of Trevethin, in the county of Monmouth, formerly known as the Golynos Foundry.

#### TRADE NOTES FROM INDIA.

MESSRS. T. JOWETT & Co. have taken over the business of Mr. D. B. Lindsay, of Juhhulpore.

MESSRS. C. F. PEARSON & Co., of Secunderahad, have closedtheir Chudderghaut branch for the present.

MESSRS COOPER, MADON & Co. have placed their Poonah hranch of pharmacy under the management of Mr. Alfred Walker.

Mr. J. R. Jones, assistant with Messrs. Thompson & Taylor, of The Fort, Bombay, has left India, his health having suffered.

Messrs. Gehe & Co., of Dresden, are cultivating a large-trade with druggists in India. The managers of some firms-say that they believe they could huy as well from English as from German firms if they could get bottom prices; but that in the former case hottom prices have to be dug for, while in the latter they are offered.

#### MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

CAMPBELL—FINLAY.—On August 17, at 48 London Street, Ecinhurgh, by the Rev. Gibson Gunn, of St. George's Parisb, Glasgow, uncle of the hride, William John Campbell, chemist, Dundee, to Elizaheth Rohertson, only daughter of Peter Finlay, Edinburgh.

GORDON—REID.—On August 17, at 51 Argylc Place, by the Rev. J. Mitford Mitchell, West Parish Church, Aberdeen, William George Gordon, chemist, 111 George Street, to Christina, youngest daughter of Mrs. C. Reid.

SMITH—DOUGLAS.—On August 9, at Kirkthorpe Church, Mr. G. E. Smith, chemist, St. John's, Wakefield, to Miss S. L. A. C. Douglas, of the same town.

#### DEATHS.

KINGSTON.—At Brixton, London, S.W., on August 10, whilst on a visit to England, William Kingston, chemist in Malta for over 30 years, in his 54th year.

Syringin  $(C_{19}H_{28}O_{10}, H_2O)$  at first prepared by Meillet and Bernays, is a new glucoside. It can be obtained from the bark of Syringia vulgaris and Ligustrum vulgare. It forms white crystalline needles, is easily soluble in bot water and alcohol, and insoluble in ether. Syringin, treated with dilute acids, resolves itself into syringiniand glucose. Syringin s used in the treatment of malaria as an antifebrile remedy.

#### THE MANCHESTER EXHIBITION.

#### FOURTH NOTICE.

SMALL section, indeed, is that occupied by exhibits of dyes and colouring materials from sources other than coal-tar, and a more powerful evidence of the inroad made by coal-tar products on the dyeing industries could scarcely be given than is afforded by a comparison of the section of the Exhibition comprising coal-tar products with that now under notice.

Messrs. Milward & Cryer, of 10 Greenwood Street, Manchester, have a case containing a complete representation of the manufacture of indigo, from the plant to the fabrics which have been dyed with its colouring material. Messrs. E. D. Milnes & Brother, a Bury firm, have a good exhibit of vegetable dyeing materials, such as galls, safilower, turmeric, and other of the extracts prepared from these articles, and, finally, of the various fabrics printed in colours with the latter. A piece of red quebracho wood is a prominent fea-ture in the showcase of this firm. Messrs. Charles Dixon & Co., of 86 Randal Street, Blackburn, seem somehow out of place among the exhibits with which they are classed, for their specialties, of which they make a good show, are such as baking-powders, cattle medicines, harness blacking, and borax soap. Mr. Alfred Hallam, of Peel Causeway, Altrincham, who represents the firm of Bourgeois Ainé, 31 Rue du Caire, Paris, has a beautiful stand of fine colours for designers to calico printers, &c.

The next group, which is devoted to fine chemicals, alkaloids, essences, and extracts, though it is composed of but a few exhibits, includes some of the most beautiful shows in the whole building. Messrs. Kay Brothers, the well-known Stockport chemists, have a large stand in this section, in which they show a great variety of products, lozenges of various kinds being particularly prominent. Messrs. Kay Brothers have taken as a base for various preparations the extract of the Linum usitatissimum, which, mixed with sugar, makes a simple linseed lozenge; medicated with chlorodyne it forms the chloro-linseed lozenge; medicating it in the form of a compound essence with aniseed, senegæ, squill, tolu, and chlorodyne, it forms an effective cough mixture.

The same extract is combined to form an agreeable toilet soap, which is likely to have some protective influence

against the action of alkalies upon the skin.

Flagons of curious old lavender-water and other scents, "coaguline" and "lava" cements, together with medicinal oils and extracts, also occupy a considerable space in Messrs. Kay's exhibit. The firm are also makers of a brightly clarified oxymel of squills, of which root, imported from the Mediterranean coasts, they are said to be the largest consumers in England.

In the evening a very attractive feature is added to Messrs. Kay Brothers' exhibit, by the display of eight tubes coated with beautifully-coloured crystals of red prussiate and bichromate of potash, &c., and lighted from within. crystal preparation is a new invention by one of the members of the firm. It is made by winding woollen or soft cotton cord round the outside of a glass shade of any size, and inverting it in a crystallising solution, weighting the inside with water or pieces of metal, until the process is accomplished. The globes may be kept revolving by attaching them to an engineshaft, and when crystallised are drained and dried.

Messrs. Howards & Sons, of Stratford, manufacturers of quinine and other chemicals, exhibit a very large assortment of cinchona, alkaloids, and salts prepared from the latter, quinine sulphate, of ccurse, occupying the place of honour. Among the preparations here represented which have more recently been placed on the market by Messrs. Howards, are acetaniled, which is administered in fever to reduce the temperature; subiodide of bismuth, a new antiseptic dusting powder; and methylal, which is asserted to be an antidote to strychnine, and to give relief to tetanic spasms, and also induces sleep, though only of short duration, owing to its being rapidly eliminated from the system. A beautiful series of cocaine preparations completes this exhibit.

Mcssrs. Mottershead & Co., of 7 Exchange Street, Manchester, have several exhibits grouped in various divisions of the chemical section. The case shown next to that of Messrs.

Howards contains fine chemicals for use in medicine, the arts, and science teaching. Elsewhere there is a very large and splendidly got-up exhibit of chemical and physical apparatus for use in chemical works or in private laboratories. are also shown Dr. Dixon Mann's medical batteries, of which Messrs. Mottershead & Co. are the sole manufacturers. The third case comprises a large assortment of the specialities for which the firm are so well known, viz.: Benger's preparations of the natural digestive ferments, peptonised foods for infants and invalids, including peptonised beef jelly, peptonised chicken jelly, pancreatised farinaceous food, peptonising powders, liquor pancreaticus, liquor pepticus, essence of rennet, &c. The peptonising powders are recommended for the preparation of peptonised or predigested milk and other articles of food, the use of which has proved of so much value in the treatment of various diseases, as fully or partially peptonised milk can be retained by the irritable stomachs of invalids or delicate children when every other form of food would be rejected, and will supply the system with all the nutriment required for an indefinite period.

Messrs. James Woolley, Sons & Co., of Manchester, like Messrs. Mottershead, have three very large stands in different parts of the building. The largest and most important stand contains drugs and chemicals, together with the preparations made from them at Messrs. Woolley's works. At the top of the case we notice "extra pale" cod-liver oil, deprived of solid fat by filtration at a low temperature; and lower down an emulsion of the same with hypophosphite of lime, as well as extract of malt with cod liver oil. This case also includes such drugs as strophanthus (follicles and seeds), kava root, cascara sagrada, frangula bark, coca leaves, viburnum, &c., together with their solid and liquid extracts or other pre-

parations.

Then follow a large number of ointments, some made with ordinary vegetable or animal fats, others with "minerolin," others again with "lanolin" or "mollin" (partially saponified fat). All these ointments which contain solid ingredients have been levigated in mills constructed for the purpose, and reduced to smooth creamy pastes in which no solid matter can be detected by the eye or touch. This case also contains mercurial ointments made with lard, minerolin, &c., ointments of zinc oxide, boric acid, bismuth subiodide, capsicin, ammoniated mercury, iodoform, and many others.

A very pleasant appearance is imparted to the assortment by several flasks of the tasteless coated pills, coloured pink, white, and yellow, for which Messrs. Woolley have earned a well-deserved reputation. These pills contain free phosphorus, iodoform, &c. Drug-grinding is illustrated by the exhibition of a set of specimens of cinchona bark, opium, nux vomica, boric acid, sugar of milk, &c., side by side with impalpable powders ground from them, and which powders have passed through sieves of 20,000 to 25,000 meshes to the

square inch.

In the group devoted to hygiene Messrs. Woolley show a rejety of tastefully nut-un articles for toilet use. The prevariety of tastefully put-up articles for toilet use. paration which appears to engage the largest amount of attention from the numerous visitors which admire this exhibit is the sanitary rose-powder, prepared from boric acid, according to the suggestion of Mr. Liner, F.R.C.S., an agreeable antiseptic, recommended as a toilet powder for ladies' use, and a dusting-powder for infants. This popular powder is now prepared in two colours, pink and white.

The third stand containing Messrs. Woolley's goods is found in the group devoted to chemical apparatus. It contains complete sets of apparatus for illustrating chemical lectures and for analytical purposes, physical apparatus, and appli-

ances for use in the arts.

Dr. Theodor Schuchardt's exhibit of German chemical preparations for pharmaceutical, medical, and other uses, is admittedly one of the finest in the entire Exhibition. In this case some of the rarest elements, metallic salts, &c, may be Selenium and tellurium metalloids, which closely resemble sulphur in their chemical reactions, and germanium, the element discovered quite recently by Professor Winkler, and which until the present time is only found in "argyrodite," a rare metal occurring at Freiburg, are here exhibited. There are also a vast number of chlorides and iodides of rare metals, such as thorium, tantalum, and titanium, and what are probably the largest quantities ever seen of indium and gallium.

Another large German firm of chemical manufacturers

Mr. Merck's, is also well represented at Manchester. This stand has not so outwardly attractive an appearance as that of Dr. Schuchardt's, nor is it so well placed, but it contains a truly astonishing variety of fine chemicals. Among these are aloin, in yellowish crystals, prepared from Barbadoes aloes, and white crystals of arbutinum, from grape-leaves. There is also a series of what are said to be true salts of caffeine, a variety of cocaine salts, cotoin and para cotoin—the latter a less active product, obtained from a variety of bark closely resembling coto. Mr. Merck also shows samples of digitalin and digitoxin, which latter is the French digitalin. The ipecacuanha alkaloid emetine, guaranine from the guarana paste, hyoscyamine, hyoscine, salol, urethane, and other more or less well-known articles, are also found in Mr. Merck's case.

The ubiquitous firm of Thos. Christy & Co. is not, of course, missing at an exhibition such as that at Manchester. The famous kola paste, strophanthus pods, and a curious jumble of nostrums and curiosities of materia medica, make up a quaint, but by no means uninteresting, whole. Messrs. Grimshaw Brothers, of the Canal Chemical Works, make a specialty of pure muriate of zinc and other salts of zinc, for use in pharmacy, medicine, and manufactures. The chief of these is chloride of zinc, in the solid and liquid state. The former is run hot into lead-lined casks for export, which is very convenient for foreign consumers, as it saves freightage. The liquid form is used by home consumers for preserving timber, the prevention of mildew

in sizing of cotton goods, &c.

Among the other zinc salts exhibited by Messrs. Grimshaw are ferrocyanide, silicate, carbonate, acetate, nitrate, bromide, iodide, &c.; in fact it is doubtful whether such a complete set of zinc compounds has ever been shown. The zinc ores and minerals which are the natural sources of zinc com-

pounds are also exhibited.

The miscellaneous exhibits occupy a considerable space, and include an extraordinary variety of subjects, from ink to lager beer, and from household matches to chlorodyne. Messrs. John Johnson & Co., of St. Anne's Works, Liverpool, have an interesting exhibit of crude plumbago from various countries, and of manufactured articles of which this mineral forms the base, polishing powder being one of the principal. They also show ultramarine and its derivatives, among which laundry blue occupies the post of honour. A curiosity in this exhibit is a model (in black-lead) of the "great sea-serpent, seventy-five feet long." This is not an apocryphal serpent, for the dates of its appearances in 1877 and 1879 are expressly mentioned on the model. How the serpent came to pop up at the St. Anne's Works is not recorded. It is a pity, also, that the serpent is not flanked by a model of the famous big gooseberry in ultramarine blue. Messrs. Bryant & May, of London, besides a large display of household matches, wax vestas, &c., have a case of nicely got-up tin boxes, raspers, and trays, specially manufactured for the South American trade, some of which attract special attention by the reason of the originality of their

A very large and interesting exhibit is that of Messrs. Jewsbury & Brown, of 44 Downing Street, Manchester. This firm counts among the largest bottlers of syphons in the United Kingdom, and they make it their boast that all the syphons they use in their business are English made, while the metal parts are manufactured of British tin, which latter is shown in the form of solid block tin pipe. The mineral waters shown in this case include soda, potash, seltzer, lithia, and magnesia water, which are among those commanding the largest sale; but to meet the taste of some individuals for whose constitution alkaline waters are not so well adapted, Messrs. Jewsbury & Brown also manufacture a plain water, highly charged with carbonic acid gas, which they offer under the name of "simple" aërated water. Some time ago the firm obtained the Certificate of Merit from the Sanitary Institute of Great Britain, after a deferred practical trial—the conditions being that the Society should appoint an examiner and purchase the waters when and where the committee should select, without the knowledge of the manufacturers. Quinine tonic water, especially recommended for use in hot and moist climates, also finds a place among the specialties of the firm. Next to aërated waters, Messrs. Jewsbury & Brown's specialty is their famous fragrant dentifrice, never yet surpassed, known as "Oriental Tooth Paste," and which they have manufactured for about sixty years. It is put up in pots of different sizes, and is advertised by its proprietors not only by a profuse distribution of tasteful leaflets, but also by the ingenious device of ornamental china plates, on which a box

of tooth-paste appears surrounded by flowers.

In the immediate vicinity of this exhibit is that of another enterprising Manchester house, Messrs. Bratby and Hinchliffe, who have a most extensive and complete collection of acrated water machinery and appliances which are used in the manufacture of acrated and mineral waters. The most striking feature of this exhibit is the working of the machines, which are shown in full operation so as to represent an aërated water manufactory in full swing. The firm make the aërated waters which are sold in the exhibition, so that any person visiting this stand has an opportunity of personally inspecting the whole of the process from the time the water. enters the filter cistern until the bottles are syruped, filled, and labelled ready for sending out to the different refreshment bars. A mammoth machine, called the "Success," used in the manufacture of these waters, is capable of turning out 3,000 dozen bottles of pure aërated waters per day, and is fitted with a pair of 3-inch double action pumps and 2-16 gallon copper cylinders, which are thickly tinned inside to prevent metallic contamination. At every revolution of the machine the pumps throw into the cylinders or condensers a certain quantity of carbonic acid gas, previously made and stored in a large gasholder, and of filtered water. This passes through a number of perforated plates, for aëration of the water, and when the required pressure is obtained the bottling may be commenced. At their beautiful and extensive stand in the chemical section, Messrs. Bratby & Hinchliffe exhibit samples of their essential oils, deresinized soluble fruit essences, colourings, acids, and chemicals used by confectioners, and in the manufacture of aërated waters, as well as their patent citrochloric acid, which is recommended as a substitute for citric and tartaric acid, and is said to answer the same purpose as the latter for acidulating acrated waters and sweets, and has the advantage of being procurable at one-third the cost of the ordinary tartaric acid.

Messrs. J. Blackwood & Co., of 18 Bread Street Hill, London, have a very neat exhibit of writing and copying inks. They also show "fetoline" marking ink, very tastefully put up. A display of red and black bars of sealing-wax in this case has a particularly striking effect. A gum cement called the "legend" is also manufactured by this firm. Messrs. P. Cochran & Co., of 32 Cable Street, Liverpool, also show various qualities of ink—black, crimson, violet, &c., as well as a fine collection of the ingredients used in ink manufacture, comprising such "drysalteries" as blue Turkey galls, cochineal, grey and red logwood, myrabolans, copperas, and

Australian gum arabic in fine large tears.

Messrs. A. P. Towle & Sons, of 75 Back Piccadilly, Manchester, proprietors of "Towle's chlorodyne," have a nicely arranged case in which they show their preparations, in the liquid form as well as in the shape of lozenges and jujubes, which effectively disguise the somewhat nauseating taste of the remedy. Towle's chlorodyne has now been twenty-five years before the public, and, notwithstanding immense competition, has quite held its own. When first commencing the manufacture, Mr. Towle intended to sell his preparations to "the trade" only, but the favour with which they were received led him to put up retail packages, which also rapidly made their way. Messrs. Towle & Sons also exhibit a variety of toilet articles, the proprietary rights of which they purchased from a Mr. Thornton, in whose family the secret of these preparations had been handed down from generation to generation. These toilet articles include amboline, recommended as a remedy against baldness. Mr. Wm. Sharratt, of Droylsden, Manchester, has an exhibit which, though not very large, comprises a goodly variety of articles, including a non-conducting boiler composition, carbolic acid disinfecting powder, and various other prepara-tions from carbolic acid, including toilet soap.

Messrs Burroughs, Wellcome & Co., Snow Hill, London, have a fine exhibit, comprising their numerous specialties, prominent among which are preparations of malt, including the popular Kepler's extract of malt, which is distinguished by its agreeable taste and high proportion of diastase. Their solution of cod-liver oil in the extract is also shown. The other

drugs shown comprise such new articles as strophanthus and terebene; while there is also a fine assortment of medicine chests, especially constructed for use in tropical climates.

chests, especially constructed for use in tropical climates.

Messrs. W. M. Jowett & Co., 73 & 75 Corporation Street,
Manchester, show a new hygienic filter, with movable inside
lining of carthenware, and so arranged that all parts are
easily accessible. Mr. T. Roberts, of Broom Lane, Levensholme, Manchester, manufactures as a specialty large filters
for use in bleaching, dyeing, paper making, and other manufactures, as well as for aërated water and ice making.
Mr. Jacob Barstow, of Pontefract, in Yorkshire, shows his
"combination" filter, which he claims to be the only one
having two distinct media for filtration; viz., natural stone
and prepared carbon, the water passing through the stone
first.

Messrs. Slack & Brownlow, of Canning Works, Manchester, have a large table, at which they show a very complete assortment of their famous compressed charcoal rapid filters, with which, at exhibitions all over the globe, they have gained over fifty medals and prizes during the more than fifty years which they have devoted to the manufacture of filters. Their appearance at the Jubilee Exhibition is, therefore, particularly appropriate. One of the firm's most popular makes is that to which they have given the proud name of "perfect filter." It is provided with a movable lining, and every part is accessible, even to the pure water chamber. All parts are also interchangeable, and can be replaced without the necessity of purchasing a new filter. For very impure water the carbon block may be surrounded with granu'ar "compressed carbon," to form a primary filter.

1. The Silicated Carbon Filter Company, of Battersea, London,

also have a fine exhibit of filters, the working parts of which are made of stoneware, so as to prevent corrosion. This filter acts by "an energetic oxidising process, very like the action of a strongly alkaline solution of permarganate boiling the nitrogenous organic matters in drinking-waters. Just as by the ammonia process the nitrogenous organic matter contained in water is made to yield ammonia, so the Silicated Carbon Filter breaks up nitrogenous matters and makes them yield ammonia. In fact, it is possible to work the ammonia process of water analysis by means of a Silicated Carbon Filter, instead of the boiling alkaline solution of permanganate of potash."

Other firms showing more or less extensive exhibits of filters, for each of which special advantages are claimed, are Messrs. W. Needham, Wilkinson & Co., 1 Hopwood Avenue, Manchester; Jos. Halliday & Co., Portland Works, Manchester; Geo. Cheavin, Boston, and J. & J. Clayton, 139 Higher Cambridge Street, Manchester.

The Liebig's Extract of Meat Company (Limited), of 9 Fenchurch Avenue, E.C., have one of the finest shows in the exhibition. Their stand, which was first exhibited at Philadelphia, and has since been travelling all round the world, is made of American black walnut, and cost no less than 1,400%. It is decorated with oil paintings of artistic merit, representing scenes at the company's works in South America. These works are situated at Fray Bentos, on the junction of the Paraguay and Paraná rivers. The town of Fray Bentos is almost the creation of the Liebig Company, which employs several thousands of its inhabitants. The well-known preparations of the firm, with the blue signature of the inventor across the label, are piled in huge columns on the

The Liebig Company's neighbours are Messrs. Evans, Sons & Co., Liverpool, wholesale druggists, whose stand vies in richness with the preceding one, and who distribute perhaps a larger quantity and greater variety of literature descriptive of their manufactures than any other house represented at the exhibition. The Montserrat lime juice and its preparations occupy, of course, by far the largest space on Messrs. Evans's stand, and the beauties of the island, which appears a kind of western Eden, are set forth by pen and pencil in a highly interesting pamphlet, freely distributed. From this it appears that the first lime tree orchards were planted at Montserrat in 1852, by Mr. Sturge, an enterprising planter then living in the island, but the speculation was at first by no means profitable, as the enterprise involves a large outlay of capital, which is for a number of years unproductive, and becomes even then only remunerative on a large scale, although the low rate of wages and the extent of uncultivated land in a salubrious climate

render the island of Montserrat particularly suitable for the purpose. Now, lime growing together with sugar planting are almost the only industries of the island, and no less than 180,000 gallons of lime juice are annually consigned to the Liverpool firm alone.

Liebig's Wine Company, of 12 St. Helen's Place, London, have a large exhibit of beef wine, malt extracts, and other nourishing medicinal preparations, containing Canadian beef extract. Other interesting exhibits in this section are those of Henri Nestlé, of 9 Snow Hill, London, E.C., the well-known condensed milk manufacturer; William Beckett, Springfield Works, Heywood, Manchester, fruit syrups, tonic bitters, and cordials; and J. R. Rockliff, 44 Castle Street, Liverpool, invalid, brandies.

Mr. B. Robinson, chemist, of Church Street, Pendleton Manchester, has a very fine stand of sparkling wines and fruit cordials in this section, and shows a most ingenious apparatus for placing these preparations on draught in such a manner that the last glass drawn from a bottle is as sparkling as the first. Mr. Robinson's "universal" champagne and sparkling cowslip and raspberry wines may be reckoned among the most popular of beverages. The champagne is produced from a mixture of English fruit and foreign grapes, by a process of manufacture precisely the same as that adopted by the best producers of French and German wines. The ripe fruit only is gathered, and the juice extracted by hydraulic pressure; this is submitted to fermentation, clarified, afterwards bottled, and finally stored, till sufficiently matured for use. Mr. Robinson also makes a speciality of the manufacture of soluble essences for the production of aërated drinks and cordials, for which, as a practical chemist of very long standing, he possesses especial qualifications.

## Gazette.

#### PARTNERSHIPS DISSOLVED.

ANDERSON, H. J., BONAR, J. A. MACD., SMITH, B. A., & IRISH, G. H. (under the name of the Antilles Produce Company), Fenchurch Avenue, City, lime-juice manufacturers.

SINCLAIR & HEALE (under the style of the Rock Mineral Water Company), Ashbrook Road, Islington, mineral water manufacturers.

TRIMMER & HINE, Leytonstone Road, Stratford, and Forest Gate, physicians.

#### THE BANKRUPTCY ACT, 1883.

#### RECEIVING ORDER.

Scott, Joseph, East Stonehouse and Plymouth, chemist and druggist.

FIRST MEETING AND PUBLIC EXAMINATION.

Scott, Joseph, East Stonehouse and Plymouth, chemist and druggist. Aug. 31, 18 Frankfort Street, Plymouth; Sept. 14, County Court, East Stonehouse.

#### ADJUDICATION.

Scott, Joseph, East Stonehouse and Plymouth, chemist and druggist.

#### NOTICE OF DIVIDEND.

SIBTHORPE, STEPHEN JAMES KENNETH, Wolverhampton, chemist and druggist. First and final div. of 11d., any day, Official Receiver's Office, Wolverhampton.

ORDERS ON APPLICATIONS TO APPROVE SCHEMES.

Desborough, James George (trading as Taylor & Co.), Daventry, chemist and druggist. Composition of 3s. 2d. Receiving order rescinded.

SHORT, RICHARD HABBERFIELD, SHORT, GEORGE, & DEYKIN, WILLIAM REDFERN (trading as Short, Short & Co., Queen Victoria Street and Birmingham, and Short Bros., and the British Mereantile Gazette, Old Street and Fleet Street), merchants and newspaper proprietors. Scheme approved. Receiving order rescinded.

## Practical Notes and Formula.

#### MALVINA CREAM.

This is a preparation made by Prof. I. Hubert, Toledo, Ohio, and is "warranted to remove freckles, beautify the complexion, and preserve the smoothness of the skin." New Idea has examined it and reports that it is put up in a white glass ointment-jar, containing 386 grains. It is a white, pleasant-looking, and pleasant-smelling ointment. The following formula will make a preparation closely resembling it:—

Saxoline (or white vaseli	ne)	••	 265	grains	
White wax	••		 50	11	
Spermaceti			 30	,,	
Bismuth oxychloride			 40	**	
Mereuric chloride			 4	grain	
Spirit of rose (4 draehms				minims	
Oil of bitter almonds				- minim	

Warm the saxoline, white wax, and spermaeeti together until melted While eooling incorporate the bismuth oxychloride and the mercuric chloride, the last previously dissolved in a little alcohol, and when nearly cold stir in the perfumes.

A lotion is used along with the cream. It is a milky-white fluid, consisting of milk of almonds (5ij. of almonds to the pint of rose water), each pint containing 2 grains of mercuric chloride and 3 drachms of zinc oxide.

#### INDIARUBBER PLASTERS.

These, according to Dr. J. J. Etmondson, have a basis consisting of purified rubber 2 parts, burgundy pitch 1 part, gum olibanum 1 part. These proportions vary a little, according to the character of the active ingredient which may afterwards be incorporated. The crude rubber is first placed in hot water to cleanse and soften it, then passed through machinery to disintegrate, and after washing it is allowed to dry. It is then passed through a grinder and subsequently between smooth rollers, which render it plastic. In this condition it is ready for medication, and the, "mixer" is a machine of special importance and of expensive construction, as well as requiring the constant attention of a skilled attendant. The mechanism consists chiefly of rollers revolving at different degrees of speed, and so arranged that moderated heat may be employed.

#### IODOFORM COLLODION.

THE following formulæ have been proposed:

						Par	rts
(1)	Iodoform		••			1	L
	Collodion	• •	••	••		14	ŀ
(2)	Iodoform					6	5
	Bals. peruvian.				••	8	5
	Collodion		• •			8	,
	Sapo mollis	• •	••	••		8	,
(3)	Iodoform					10	)
	Æther				••	20	)
	Ol. rieini	••		••		20	)
	Collodion	• •				100	)

#### MANUFACTURE OF ROUGE.

The preparation of this substance, so largely used in the arts for polishing purposes, requires great care in order to have a product free from acid. It is prepared by roasting ordinary sulphate of iron. Both the colour and the cutting properties of the rouge are influenced by the degree of heat applied. According to the Iron Age it has a darker snade and heavier cut after strong ignition than when heated to a lower temperature. The tint appears to be due solely to the actual temperature attained, and not to the duration of the ignition. The oxide once obtained is ground under water, by means of stones working either horizontally or on the principle of the mortar-mill. The lough particles remain at the bottom of the tank, while the finer ones, which are kept in suspension by the agitation of the water, are carried away by the overflow. A stream is kept constantly running into the tank to maintain the supply, and its quantity is so regulated that only a fine powder passes away from the grinder. From

the mill the liquid proceeds to tubs arranged in series, and in the first of these the heavier and larger portions separate, the product being from time to time returned to the water above the millstones. Oxide suitable for the manufacture of crocus falls out in the next tanks, and then follows rouge of various degrees of fineness, the last tub of all yielding the most valuable. A little alkali is sometimes added to the water used in glinding, with a view to prevent an acid reaction, but perfect roasting in the first stages is the true remedy. Rouge, whether fine or comparatively coarse, must be uniform, a small admixture of gritty particles, which scratch the work, being fatal to an otherwise excellent sample. Mere fineness, however, is not the only essential feature of a rouge, and if a sample be made much finer by hand-grinding in a Wedgwood mortar, the cutting properties are to a large extent destroyed. Acidity in rouge is due to the presence of basic sulphate of iron, which is partially dissolved by treating it with water.

#### PRESERVATION OF LARD.

A NUMBER of experiments have recently been made by Mylius, for the purpose of ascertaining the best method of preventing lard from becoming rancid. He made a mixture of fresh lard 9 parts, and water 1 part, and used this mixture to prepare ointments with various preservatives. After fourteen days a sample was taken from each lot and a definite quantity of solution of iodide of potassium added to each. After three hours the samples were arranged according to the colour they had assumed. The following results were obtained:—

Per eent. of Preservatives add	led				Colour of Ointment
{Glycerin, 10 Oil of eloves, 0.1	::	::	••	)	white
Oil of cloves, 0.1 and 0.2	**				ight yellow
Benzoie aeid (dissolved in Benzoie aeid (mixed in), 0			Land	4	,,
		102	• •	• •	,,
Cinnamic aeid, 0.1 and 0.2	••	••	••	••	- "1
Carbolic acid, 0·1 and 0·2	• •	• •	• •	• •	brown
Creasote, 0.1 and 0.2	• •	• •	• •	• •	,,
Oil of wintergreen, 0.1 and	d 0.2	••	••	••	٠,
Balsam peru, 0.5	• •	••	• •	••	**
Salicylie acid, 0·1 and 0·2			••	••	,,
Boric acid 0·1 and 0·2	••	••	••	••	dark brown
Glyeerin 10	• •	••	• •	• •	,,
Without preservative	••	••	••	••	,,

After one day, four weeks, and two months, respectively, the same results were obtained. All experiments made since then have shown that oil of cloves answers the purpose best, and even benzoic acid will answer if it is dissolved in the fat by mclting. It remains, however, to be ascertained why these substances retard the absorption of oxygen by the fat.—Pharm. Cent. and Amer. Drug.

#### LILY OF THE VALLEY PERFUME.

Extract of jasmine	 ••			20 oz.
" ylaug-ylaug.		••	••	3 .,
Cardamom seeds				1 "
Oil of orris flower .				10 drops

The cardamom cdour, if predominating, must be neutralised with jasmine.

#### KEEPING BUTTER.

AT a recent meeting of the French Société d'Encouragement, M. Grosfils, of Verviers, described a new method ne had hit npon for preserving butter. The principle of it is to hinder the crystallisation of salicylic acid added to the butter, and so maintain its antiseptic power indefinitely. This he effects by using lactic acid to dissolve the salicylic acid. The composition he recommends consists of 98 parts of water, 2 parts of lactic acid, and  $\frac{1}{2000}$  of salicylic acid. This will preserve good butter indenntely, even at high temperatures and in hot countries. M. Grosfils estimates that the butter, supposing it retains 5 per cent. of its weight of liquid, will retain 1 part of salicylic acid to 100,000. Lactic acid beyond 2 per cent. gives a slightly acidulated taste which might affect the saleability of the butter; this may be removed by simple washing with water, or, better, with skim milk containing a little bicarbonate of soda. The preparation of a kilogramme of butter by M. Grosfils' process does not cost more than one or two centimes.

## Foreign and Colonial.

THE NET WEIGHT OF A CASE OF OPIUM.—In a circular recently issued the statement is made that Smyrna opium merchants have been in the habit of, during the past year, packing up to 190 lbs. of opium to the case. It is generally understood that a case of opium contains 150 lbs., and wherever an excess is found the difference is settled at the market price by the buyer. From reliable information regarding the average contents of a case of opium it is found that in 1882 the average was 167 lbs.; in 1883, 177 lbs.; in 1884, 158 lbs.; in 1885, 161 lbs.; in 1886, 156, and so far this year, 154 lbs. Thus it will be seen that, instead of increasing, the average weight per case has heen steadily falling, and is now smaller than in any of the preceding years named.—Oil, Paint, and Drug Reporter.

NEW CANADIAN CUSTOMS TARIFF.—The Dominion House of Commons has adopted a Customs tariff, according to the provisions of which the duties on the following articles among others have been changed, and will now be:—

	Dois	. cts.	Per Cen
British gum, per lb	0	01	_
Liuseed, or flax-seed oil (raw or boiled) ad va	ıl.		30
Opium, per lb	1	CO	
Photogr. dry plates, per sq. ft	0	15	_
Varnishes and lacquers, per gall	0	20 ε	nd 20
Glass carboys and demijohns, bottles and d	e-		
canters, flasks and phials, of less capaci-	ty		
than 8 oz		_	30
canters, flasks and phials, of less capaci-		_	30

THE DEVELOPMENT OF JAPANESE FISHERIES.—Some months ago we announced that the Japanese Government had sent an official on a tour through the United States to inspect the fisheries in that country, with a view to enable the Japanese to improve their own fisheries (principally of cod) and to compete with the products on the European markets. We now learn that Mr. K. Ito, the official in question, has almost concluded his investigations. He states that he has been well received by owners of factories, "who imparted to him valuable information for use in the Japanese fisheries." He will start soon for British Columbia to study the salmon fisheries. Somehow we do not think that the "valuable information" vouchsafed by the American fishery owners will henefit their prospective competitors much.

Pharmacies in Italy.—According to official statistics published recently there are in the Italian kingdom 10,303 pharmacies, or one to every 3,100 inhabitants, which is a far lower average of inhabitants than in most European countries. There are 11,437 qualified pharmacists occupied in ministering to the wants of the population. There is no pharmacy law applying equally to all the Italian provinces. In some parts of the country the number of pharmacies in proportion to the population is limited by law, in others competition is free from State control. The number of pharmacies in proportion to the population is far greater in Southern than in Northern Italy. In Naples there are 241 pharmacies (1 to 2,060 inhabitants); in Florence, 73 (1 to 2,360); in Venice, 45 (1 to 3,010); in Rome, 91 (1 to 3,430); in Genoa, 50 (1 to 3,700); in Turin, 67 (1 to 3,890); in Palermo, 64 (1 to 3,910); and in Milan only 41, or 1 to every 5,580 inhabitants.

Ammonia Indigo in Java.—Alluding to a recent article on the ammonia process for indigo-making in THE CHEMIST AND DRUGGIST, a correspondent writes to the Indische Mercuur that the ammonia process has been utilised in the manufacture of Java indigo since about ten years, being the invention of a Dutch-Indian gentleman, Mr. Zaayers. It is also stated that the ammonia process yields different results in every country where it is applied, and that its effect is entirely dependent upon the nature of the soil in which the indigo worked has been grown. Indigo cultivated on a poor sandy soil or on light clay yields the same amount of indigo whether treated by the ammonia process or without it, the ammonia in this case affecting only the colour-in fact, the fatter and richer the soil, the hetter are the results obtained by the application of the ammonia process. In the Java residency of Djokdjokarta, where the soil is a poor one, the ammonia process has been abandoned in many factories, but in Soerakarta it is generally applied, although it does not yield an increased production of more than 10 per cent. as

compared with the ordinary process. In the residency of Madiven, however, the ammonia process, when applied to plants raised on a soil ranging from light to heavy clay containing very little sand, on which indigo had never been grown before, gave surprising results, the yield by means of the ammonia process being 50 per cent, larger than that by the old system. As regards quality, too, the ammonia indigo obtained was fully  $3 \frac{1}{4} a$ , to  $5 \frac{1}{4} a$ , per 1b, hetter than the other variety. It was found, however, that the cakes of ammonia indigo lost about  $11\frac{1}{2}$  per cent. more in weight by drying than the others, the manufacture of  $\frac{1}{2}$  kilo. dry cakes requiring 9 34 litres ammonia indigo and only 8.27 litres ordinary indigo.

OPIUM-DOCTORING IN SMYRNA.—It is said that within the last few years the adulteration of opium has been pursued at Smyrna in a far more systematic manner than formerly, and the practice threatens to grow still further. About five years ago certain opium-dealers in Smyrna, after sundry experiments in kneading together old and new opium by applying vapour heat, secretly purchased machinery in England. By the aid of this apparatus they were able to mix opium on a considerable scale, and the product thus manufactured at first found a ready sale on most European markets. At present, it is said, nearly all Smyrna dealers who are in the habit of making firm offers to the principal markets are in possession of the kneading machinery, and turn out an opium consisting partly of the new product and partly of two or three year old juice. The opium thus produced has been exported in large quantities to the United States, in order to save import duty; but probably this outlet will be closed in future, for the Customs authorities at New York have recently decided that no opium containing less than 9 per cent. morphia shall be allowed to enter the United States, and that shipments which do not come up to this standard must either be destroyed or re-exported within six months. The Chinese refuse to purchase the Smyrna mixed opium, and orders from Cuba or California frequently contain the stipulation that no kneaded opium shall be shipped. Consignments forwarded to Hong Kong and Singapore have also been returned to Smyrna. In England the Smyrna mixed opium is not unknown, but it is not so largely sold here as on the Continent. It is stated that, though in kneading opium by means of machinery it is quite possible to bring the mixture up to a certain definite standard of morphia, experienced opium-buyers are always able to detect the

THE MARSEILLES OIL INDUSTRY, which is one of the principal branches of trade of that seaport, has lately been in an extremely languishing condition, mainly owing, it is said, to foreign competition, and under these circumstances the oil refiners, apparently unable to help themselves, have addressed vehement appeals to the French Government to extend to them the usual nostrum of protective duties high enough to exclude foreign oils from the French market. Formerly, the Marseilles refiners say, their produce found a market not only in France hut in many other European countries. The latter, however, have since developed their own industries and do not now require to place their orders at Marseilles. On the other hand, the importation into France of cotton-seed oil, partly from the United States and partly via England, is assuming enormous proportions, having grown from 2,083,800 kilos. in 1882 to 3,345,715 kilos. in 1883, 4,384,880 kilos. in 1884, and 9,039,274 kilos. in 1885. Formerly the Americans destroyed their surplus stock of cotton-seed, hut since they discovered the advantage that could be derived by pressing the seed and making cattlefood of the residue, the European markets have been swamped with the American cotton-seed oil. Marseilles is now in danger of losing her oil refining trade altogether, and of seeing her import business of Indian and African oil seeds seriously crippled, unless the duty on cotton oil be raised from 6 to 15 francs per 100 kilos. (= 2s. 6d. to 6s. per cwt.). In addition to the American competition a new danger is now indirectly threatening the Marseilles oil refiners, though they did not speak of it in their appeal to the French Government. One of the principal ingredients used in margarine-making in Holland is seed oil and fat, which is mainly bought in Marseilles. If, as is not unlikely, the Dutch margarine industry should receive a serious blow through the passing of the Margarine Bill in England the Marseilles trade, in its turn, will suffer a corresponding decline.

#### CONSULS' REPORTS.

#### EGYPT.

Drug Trade of the last two years were as under. The effects of Alexandria. enormous reduction in the quantity of gum arabic exported.

•	1883	1885
	£	£
Drugs proper	37,134	29,287
Chemicals, medicines, and perfumery	11,699	9,543
Gum arabic	14,717	100,112
Wax	9,879	11,867

while among the imports the following are enumerated: -

					1886 £	1885 £
Indigo		••			184,635	254,832
Other dyes		••			35,791	43,693
Soap	••	••	• •	••	131,608	142,618
Chemicals a	n <b>d</b> p	erfume	ry		112,335	107,785
Olive oil	••	••	••	• •	80,110	93,031
Spices	••		••	••	49,823	67,141

#### FRENCH COLONIES.

Vanillagrowing in Réunion.

The quantity of vanilla exported from the island of Réunion in 1885 was 111,229 lbs. (value 54,834l.), while in 1886 110,308 lbs. (value 53,752l.) were shipped. The high prices dately realised by vanilla on the European markets have been a great temptation to many persons in Réunion to convert what little land they possess into vanilla plantations; but this happy state of things is not destined to a long life, vanilla being an article for which the demand is restricted, and its over-production must necessarily be attended by a great fall in value.

Essential Oils. The industry of perfume manufacture is assuming considerable proportions in Réunion. At present the industry is mainly confined to the manufacture of essence of geranium, great tracts of land having been devoted to the cultivation of this plant. Other perfumes are as yet made on an insignificant scale only; but this industry may assume large proportions.

#### JAPAN.

Nagasaki The value of the imports into Nagasaki of Drug Trade. Western (European?) drugs, medicines, and chemicals in 1886 was 5,037l, against 3,551l. in 1885. Of dyes and paints 3,982l. worth was received in 1886, and 1,876l. the year before.

The exports include: 1885 lbs. £. lbs. £ Camphor 76,194 ... 5,096,674 4,288,918 80,300 Cuttlefish .. 2,047,472 39,822 .. 2,165,091 38,441 Drugs (sundry) 2,200 3.290 .. .. 1,054,356 Sulphur .. 1,053,604 1.716 2.211 Vegetable wax 151,641 2,615 ... 385,538 6,850

In 1886 4,117 tons of sulphur were exported from Hakodate, of a value of 7,960l. 6s. 8d., Sulphur Exports. against 6,260 tons 15 cwt., valued at 14,529l. 7s. 6d., in 1885, being a decrease of 2,190 tons and 6,5691.0s 10d. The production was about the same as in 1885, and the prices did not vary. Of the quantity shipped, about 950 tons went to San Francisco and the remainder to New York. At the end of the year there were some 2,500 tons of sulphur on hand, owing to difficulty in obtaining suitable vessels to take it away. It is anticipated that the production of sulphur during 1887 will be greatly in excess of former years, as a company has been formed to work the sulphur mines at Atosanobori, near Kushiro, and a line of rails will be laid from the works to Shibecha, a distance of nearly twenty-five miles; thence the sulphur will be conveyed by river to Kushiro, a distance of about forty-four miles. Hitherto great difficulty has been experienced in conveying the refined sulphur from the works to the river.

Cuttlefish 302 tons of cuttlefish were shipped from Hakodate during 1886, valued at 7,275l. 16s. 8d, being a considerable increase over the amount exported in 1885, which was 197 tons, valued at 6,247l. 14s.

The take during the past year was by no means up to the average, and the increased export is due to the buyers having, as mentioned in last year's report, a large stock from the previous year on hand, which went forward in 1886. Prices were lower, ranging from 1l. 12s. per picul for best to 1l. 4s. for poorer qualities.

#### NORWAY.

This year the fishings were much hindered by continuous storms, which were severely felt at TheNorwegian the south-west cod-fisheries, as also on the outer side of the Lofodens. The large cod-Fisheries. outer side of the Lofodens. The large cod-fishery of the Lofodens also suffered, and it would have been one of the worst fishings of late years had not the fish run into a small protected fjord, named Ostnæsfjorden. In this fjord it is estimated that nearly 20,000,000 fish were taken in seven weeks. The coming of the fish into this fjord is un-The Finmarken fishing, on account of storms, commenced badly, but finished with a catch of about  $2\frac{3}{4}$  millions more than last year. The prices of fish and liver were about the same as in Lofoden. The following figures give the comparative results of the principal fishings for the years 1886 and 1887:—Lofoden—Fish caught (1887) 29,500,000, (1886) 31,000,000; gallons medicine oil (1887) 209,000, (1886) 220,000. Finmarken—Cod-fish (1887) 10,863,000, (1886) 8,100,000; gallons medicine oil (1887) 122,100, and (1886) 47,300. Söndmör—Cod-fish (1887) 11,500,000, (1886) 7,100,000; gallons medicine oil (1887) 11,000, (1886) 77,000. The aspectors of the other minor fishings have not yet issued a correct statement of the results, but it is estimated that the entire winter fishings will produce 14,000,000 cod fish and 60,000 gallons of cod-liver medicine oil less than last year.

#### PERSIA.

Bushire The following articles figure among the exports exports. of the port of Bushire:—

	1886. Value £	1885. Value £
Drugs and medicines Dyeing and colouring materials Gum Opium Perfumery	2,216 4.387 4.978 303.071 9,025	4,010 4,126 5,328 3+0,240 6,974

#### SPANISH COLONIES.

Cuban Honey. In 1886 2,341 tierces of honey were shipped from Havana, representing a value of 12,685 $\ell$ , against 2,184 tierces (value 16,900 $\ell$ ) in 1885. The greater part of the honey shipped from Havana is preengaged by dealers there or in Europe; sales on the spot are therefore few, and the extreme prices ranged from 1s. to 1s. 1 $\frac{1}{3}$ d. per gallon, as against 1s. 2 $\frac{1}{4}$ d. to 1s. 6d. last year. The total export exceeded that of 1835 only by 157 tierces, which may be taken at 90 gallons each. None was shipped direct to Great Britain.

Cuban Beeswax. The same remarks apply to wax, the prices for which in the open market were from 72s. to 104s. per quintal (100 lbs.) for yellow, and for white from 120s. to 132s. There were shipped from Havana 4,049 cwt., value 20,245l., in 1886, and 6,272 cwt., value 31,235l., in 1885.

#### VENEZUELA.

Exports from the year 1886 the following articles occupy a Bolivar. In about four-fifths of the total quantity of drugs shipped.

То	Balsam Copaiba	Cinchona Bark	India- rubber	Sima- ruba	Tonquin Beans
Trinidad New York Hamburg	2,900 4,172 276	4,004 1,302	10,254 13 824	3,216 1,290	111,967 63,144
Total kilos.	7,438	5,306	24,078	4,506	175,111

CAUTION.—The faney word "SANITAS" is our Registered Trade Mark.

#### BEST DISINFECTANT. THE

Non-Poisonous. Colourless. Gives no Stain. Fragrant.

Fluids (Fresh Water, Sea Water, and Crude); Oil; Emulsion; In-White Powder; Sheep Dip; Hard, soft, Animal, Brown Windsor, and Toilet Soaps; Soap Powder; "Sanitas" Disinfecting Jelly; Veterinary Ointment; Tooth Powder; Toilet Powder; Toilet Fluid; Furniture Tream; Antiseptic Gauze; Furnigators; Air Purifier and Urinal Tablets.

GOLD MEDALS, Calcutta, 1884, and Paris, 1885.

Liberal Terms, New Show Cards and Bills to the Trade.

Manufacturers. The "Sanitas" Co., Limited, Bethnal Green, E. C. T. KINGZETT, F.I.C., F.C.S., Managing Director.

# "THE QUEEN OF TABLE WATERS." ICED APOLLINARIS WATER.

"There is a popular but entirely mistaken notion that ice is in its nature pure and innocuous; it is on the contrary very apt to be impure and noxious, and may easily contain the germs of fatal disease."

"Apollinaris Water, by its absolute purity, affords complete guarantee against the dangers of symotic disease incidental to ordinary drinking-water. Its sparkling and refreshing character renders quite unnecessary the introduction of ice into it. THERE IS, OF COURSE, NO OBJECTION TO ICING APOLLINARIS, AS CHAMPAGNE IS ICED, BY THE EXTERNAL APPLICATION OF COLD UNTIL ITS TEMPERATURE IS BROUGHT DOWN IN HOT WEATHER TO A PLEASANT COOLNESS. So treated, it is a beverage as refreshing and agreeable as it is pure and wholesome"

## SLACK & BROWNLOW'S COMPRESSED CHARCOAL

See Advertisement, page 17.



SER ADVERTISEMENT, PAGE 17

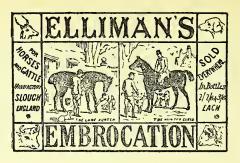
BROMO IODINE MINERAL

The strongest known lodine Water in the World.

This remarkable Spa has been purchased by a Syndicate of gentlemen who have determined to make more widely known the extraordinary curative powers of this spring, which contains more Iodine and Bromine than any spring in Europe—"And, we may sately add, in any part of the World."—Dr. Cuffe, for many years late resident Physic ian at a couldult spa.

An analysis of the water having been made in November, 1886, by Professor Andleyn M.R.S., corresponding member of the Royal Bavarian Academy of Scales and Syndy and





SAFEII POWEBEILL HANDVII

In Perforated Tins - Retail 1-lb. Tin, 1s. Trade Price, 8s. per dozen, less usual discount. Through all Wholesale Houses. CONDY & MITCHELL (Ld.), 67 & 68 Turnmill St., London, E.C. SOLE PROPRIETORS OF CONDY'S FLUID.



#### THE PHARMACY BILL.

THE gentleman who had charge of this Bill in the House of Commons, having apparently lost hope of pushing the measure through the House of Commons this session, wentholidaying a week or two ago, and the Bill has since been dropped. Simultaneously the correspondence which took place between the Parliamentary Bills Committee of the British Medical Association and the President of the General Medical Council has been published, and from this it seemsthat the Association committee were scarcely justified in their assumption that the President of the Council expressed a general concurrence of the Government in the views urged by Mr. Ernest Hart, representing the Association. What Mr. Hart urged was (1) that the curriculum should not include medical teaching; (2) that the words "materia medica' should be erased and replaced by such a word as "pharmacognosy;" (3) that the Privy Council should have the power of approving the details of the scheme of lectures and of the curriculum; and (4) that the power given to the Pharmaceutical Council to dispense with the curriculum and other conditions was dangerous. Mr. Marshall, the President of the Medical Council, with Dr. Quain and Mr. Simon, had an interview with Mr. Lennox Peel, the secretary of the Privy Council, and the result of the interview is contained in a letter addressed by Mr. Marshall to Mr. Hart. In this themedical teaching bogey is quietly and effectually disposed of. "It is felt most strongly," writes Mr. Marshall, "that the Legislature would not agree, by any form of prohibition, to limit or restrict the acquisition of any kind or amount of knowledge concerning the properties of drugs and their actions on the living body, especially as most of them are de facto poisonous in certain quantities." This does not look like general concurrence with the Association's view that the teaching of medicine to chemists "might have an injurious effect in giving a little and dangerous kind of knowledge to a class of persons, many of whom have in past years shown a tendency to the unauthorised practice of medicine." The Association's objection, apart from the childish hit at pre-

scribing chemists, is ridiculous in the extreme, and if carri d into effect would prevent our students being taught what drugs are used for, and doses would become a dead letter so far as examinations are concerned; so that, as Mr. Marshall says, it is not practicable, nor in the public interest desirable, to recommend the adoption of the Association's restriction. As regards the words "materia medica," it is pointed out that they exist in the 1852 Act, and if they were omitted from the Bill it would be necessary to erase them from the Act, which is "a proposition in support of which it does not seem possible to obtain, from past experience, evidence of injury to the medical profession of sufficient weight to carry conviction to the mind of the Legislature." Then there would be legislative difficulty in defining the limits within which materia medica should be either taught or examined upon; accordingly the interviewers of Mr. Lennox Pecl agreed that it was best to adhere to the 1852 Act wording, although Mr. Peel suggested that in the Bill it might be specifically mentioned that "the Act shall be construed as one with the Pharmacy Acts of 1852, 1868, and 1869" Mr. Hart's third suggestion was quite uncalled for, as all details of the curriculum will have to take the form of by-laws, and by-laws, the Pharmaceutical Council well know, must receive the sanction of the Privy Council. So far, therefore, the objections of Mr. Hart and his committee are summarily disposed of; and on the fourth point, regarding the power to dispense with pre-examination conditions, Mr. Peel assured the deputation that any relaxation of the rule regarding three years' apprenticeship "is intended to be exercised only in exceptional cases, and that the members of the medical profession may be satisfied that the power to remit the essential condition [three years' apprenticeship] would be carefully watched through the agency of the Privy Council." This is perhaps the most unsatisfactory part of the Bill, and the reply is not assuring. Exceptional cases are not amenable to by-laws, and it is only through by-laws that the Privy Council can veto the action of the Pharmaceutical Council. The power is too great to put into the hands of an irresponsible body. It is not a question, as Mr. Peel thinks, of remitting the three years' apprenticeship condition, but one of suspending the by-laws for the benefit of favoured individuals. But anyhow it does not seem clear how this weak point in the Bill is one which directly calls for the interference of the medical profession. Sir Walter Foster, in whose name the amendments desired by the Association are set down, is of course acting on their behalf. It would be interesting to know whether he framed them before or after the letter from the President of the Medical Council had been brought to his knowledge, as we must suppose was done.

# THE REPORT OF THE BOARD OF INLAND REVENUE.

THE report published by the Board of Inland Revenue for the year ending March 31, 1887, has just appeared. As usual, it contains some matters of interest to chemists and druggists.

The department collects a total revenue of over fifty-six million pounds sterling, of which twenty-five millions are from excise duties, eleven millions from stamps, and sixteen millions from income tax. Land-tax and house duty are the other chief classifications of the mighty total. The total charge of collecting this revenue, including buildings, salaries, stationery, postage, &c, was last year 1,890,000*l.*, or 3 40 per cent. The Board are rather proud of having reduced the percentage of collection costs by 1 per cent. within the last forty years, though it must be remembered that the sum

dealt with in the earlier period was less than two-thirds the present total.

Patent medicines yield a very tiny proportion of the vast whole, the stamps for the past year figuring for 179,508l., and the licences for 5,2281. The only comment made in the report on this section of revenue business is that "the increase is this year almost nominal." Last year the Board said, "The increase under the head of patent medicines is considerable, as usual, and shows how these medicines continue to gain in public favour." The stamp return shows an increase of only 7891. over the previous year. This is noteworthy, as the increases for some years have averaged over 5,000l. a year, and from 1884 to 1885 and from 1885 to 1886 were each 9,000l. per annum. This seems to show that these medicines are getting a check in their hold on public favour. The number of licensed dealers is, however, still growing. These now number 20,911. They were 20,279 last year, and 20,012 the year before. Of the present vendors 19,440 are in England and Wales, and 1,471 in Scotland.

The employment of methylated spirits in the arts and manufactures continues to increase. The total quantity methylated during the past year was 2,673,375 gallons, which was 195,577 gallons more than in the previous year. Ireland, which used only 760 gallons of methylated spirits in 1885-86, used 5,645 in 1886-87.

"It has been found necessary," says the report, "in the interests of the revenue, to restrict the use of methylated spirits in some cases.

"Any person authorised to receive methylated spirit for use in any art or manufacture, whether he is or is not a licensed retailer, must obtain all methylated spirit from an authorised methylator, and not, as formerly, from any retailer."

The coffee mixture labels have been a comparative failure. They yielded 6,344*l*. in 1882, but the income from them has gradually dwindled to 3,212*l*. last year.

Dr. Bell's report of the work done in the Somerset House laboratory is given in an appendix. The number of samples analysed during the year amounted to 27,644, which was 1,094 more than in any previous year. The magistrates referred forty-five samples under the Sale of Food and Drugs Act to this laboratory during the year, these comprising milk, pepper, butter, bread, coffee, whisky, and ale. In twentyfour of the cases Somerset House confirmed the conclusions of the local analyst, but in twenty-one the controlling analyses did not support the charges alleged. Poivrette was found in two out of eleven samples of pepper sent in, but in eight cases where the analyst had certified the presence of ground rice no mixture of that or any other body was found. Alum in bread was twice alleged by the public analysts, but in both cases Dr. Bell's staff found none. Whisky, declared by the public analyst to have been unduly diluted, was found to be above instead of below the minimum legal strength, and ale certified to contain common salt did contain it in the quantity stated, but that quantity was less than is found in some genuine beers.

The bulk of the work done in the laboratory is for the Admiralty, the India Office, the Board of Trade, and especially for the Customs and Inland Revenue. As is well known there has been great activity in prosecuting publicans for diluted beer. In each of these cases the scientific evidence has had to be complete before action could be taken. The chemists actually analysed 1,999 samples of beer taken from 1,022 publicans, and they found water or water and sugar in 624 cases. The dilution of beer with water has long been known, to be prevalent, especially in London, but it was only made a penal offence by the Act 48 & 49 Vict. c. 51, passed in 1885. Among the miscellaneous discoveries made in the laboratory were the following: a composition sold for the

prevention of "scale" in boilers consisted simply of crude carbonate of soda; a certain "mountain snow" sold for making enamelled paper proved to be merely barium sulphate made into a paste with water; a tea-spoon sold to the Admiralty, and which according to contract should have been coated with 42 grains of silver was found to bear less than one grain on its surface; and some Prussian blue sent to India, of good quality when sent out, was found to have become insoluble and unfit for use; and this, it was ascertained, was owing to it having been subjected to an undue amount of heat. Of 22 samples of drugs examined for the Admiralty, 3 were found to be of low quality. Of 374 samples of herb, horehound, ginger, or botanic beers examined, it was found that by far the larger quantity contained more than the 2 per cent. of proof spirit allowed by law. In 43 of these beverages the amount of proof spirit ranged from 5 to 10 per cent.

#### THE DRUG TRADE IN MADAGASCAR.

A FEW months ago a young chemist, for whom the mother country's boundaries had become all too narrow, and who had been casting his eye over the "new" regions of the world, applied to us for information concerning the probabilities of a rise to fortune by commencing business as a druggist in the island of Madagascar. Why our correspondent should have selected a spot so far outside the current of the broad stream of emigration was not explained; he may have considered the British colonies "played out," or surmised that in the out-of-the-way African island he would be free from that competition with which the unfortunate druggist has to contend in countries better known. We furnished to our inquirer such details as could offhand be obtained, but considering that to other British pharmacists also some further information concerning the prospects of a settlement in Madagascar would be of interest, we addressed a letter on the subject to Mr. W. Clayton Pickersgill, British Vice-Consul at Antananarivo, and that gentleman has courteously replied as follows to our inquiries:-

> "Her Majesty's Vice-Consulate, "Antananarivo, June 27, 1887.

"SIR,—In reply to your letter of April 25 last, I have the honour to furnish you with the following items of information:—

"The consumption of drugs in Central Madagascar has always been much in excess of the local trade in such commodities. Until quite recently the chief importers were the medical officers in charge of the missionary hospitals, the Medical Superintendent of the Government Hospital, and the members of the various missionary societies. Large quantities of drugs are distributed by the above-named agencies in the form of medicinal preparations, either gratis or at nominal prices.

"There has, however, for many years past been a considerable trade done in quinine, Epsom salts, bichloride of mercury, calomel, santonine, iodide of potassium, and such other drugs as the natives have become well acquainted with the use of. It may be interesting to note that iodide of potassium used to be sold in the country districts of Central Madagascar at the rate of weight for weight against chopped-

up Mexican dollars.

"During the last twelve months drugs have been liberally disposed of at a free dispensary established in Antananarivo by a doctor attached to the French Residency-General.

by a doctor attached to the French Residency-General.

"About the same time that the free dispensary was started, a Scotchman in the drug trade came over from Natal to open a shop as a dispensing chemist. His business was injuriously affected, of course, by the tempting offers of the French doctor, and also, to some extent, by the easy terms on which medicines can be obtained at the hospitals, but his experience, extending over eight or ten months, led him to the conclusion that it would be possible to make a modest living in the trade, in spite of unfavourable circumstances, by importing direct from European markets.

"The enterprising Scotchman was induced to suddenly sell his stock-in-trade to the Government hospital at less than the cost price and to hurry off to the new goldfields of Natal by reports of successful speculation there, and the capital of Madagascar has since remained without a druggist's shop.

"But a partnership has been formed with a view to the re-opening of this business by two natives and a European, one of the former being the Queen's physician, who studied medicine at the Edinburgh University, and obtained one of its most honourable diplomas. The second partner is a member of the family of the Prime Minister of Madagascar, and the European is a young Englishman who has lately come into the island to establish a trade in fibre. Their store will be in charge of a native dispenser trained at one of the hospitals.

"I have the honour to be, sir, your most obedient humble ervant, "W. CLAYTON PICKERSGILL,

"To the Editor of Her Majesty's Vice-Consul.
THE CHEMIST AND DRUGGIST."

The moral of Mr. Pickersgill's letter is clearly that the chances of a successful career in Madagascar as a druggist are but moderate at best. True, the consumption of drugs in the island is large, and there is not at present, it would seem, much competition in the capital, but the wholesale distribution of drugs and medicines by missionaries, both Catholic and Protestant, has to be taken into account. That missionaries are largely interested in the drug trade of the country was shown a few years ago, when grave international complications arose between Great Britain and France in consequence of the arrest by a French admiral of a British missionary, and the destruction of the latter's stock of drugs, for which, if we recollect rightly, he claimed and received from the French Government compensation to the extent of about 1,000l. A ubiquitous Scotchman, he whose kindred overrun our Eastern possessions to such an extent that in certain parts of India the natives are reported to talk Hindustani with a Scotch accent, has also, of course, paid a flying visit to the island of Madagascar, though it would appear as if he had again forsaken that country for the African mainland—not an encouraging sign, by the way. The German pharmacist does not seem to have as yet included the island within his ken.

The bulk of the trade of Madagascar is carried on with the British colony of Mauritius, while the French settlement of Isle Bourbon also comes in for a share. In 1882 the imports from the United Kingdom were valued at 38,509l, while we received 43,899l, worth of goods from the island. Considering that Madagascar is the third largest island in the world, occupying an area of 228,564 square miles, or about twice the size of the United Kingdom, and containing at least 3,000,000 inhabitants, a total trade of 6d. per year per inhabitant is not a large one, and would doubtless be capable of expansion. No doubt a chemist settling in Madagascar could considerably improve his chances of success if he had at command a capital large enough to enable him to carry on an export as well as an import business, and to send to England crude drugs produced by the island in exchange for the medicinal preparations imported from here. At present almost the only Madagascar produce seen in our drug markets are copal, honey, and beeswax. The latter article especially we receive in very large quantities, and scarcely a drug sale passes in which the dark brown wax produced by the bees with which the tropical forests of the island swarm is not offered. But a practical English chemist would find almost unlimited opportunities of exporting from Madagascar valuable drugs and spices, the collection and cultivation of which are only neglected now for want of intelligent supervision. About two years ago a Dr. Parker, formerly physician to the Queen of Madagascar, forwarded to England a collection of nearly 1,500 distinct species of plants, many

of them unknown, but including a large number which might prove of the utmost value from a medicinal point of view. The plants sent to England by Dr. Parker included an almost complete assortment of native vegetable materia medica, comprising large numbers of drugs used as remedies in renal or urinary diseases, which prevail extensively in the island, about one-third of the adult masculine population being, it is said, afflicted with stricture of the urethra. Vermifuge drugs also are very much used.

The Madagascar copal trade is one of the few industries of the island which are fairly well developed; orchella weed is also collected in large quantities on the Western coast; but the cultivation of spices-such as cloves, cinnamon, and vanilla, for which many parts of the island are extremely well suited—is quite neglected at present. The indiarubber vine is abundant in all the forests of the interior, but it is not worked in a businesslike manner at present. Gums are abundant in the woods, while honey and beeswax may be had in almost any quantity. Among other metals mercury is found in the mountains, but it has never been brought into commerce, and probably the absence of good roads in the island may prevent the profitable working of the mines. Certain industries—such as oil and sugar mills, soap, carpet, and cotton manufacture, and, above all, the manufacture of gold and silver ornaments, in which latter the natives have attained high proficiency-flourish in the capital, Antananarivo. The chief port of the island, Tamatave, is said to contain a population of about 2,000, of whom 300 are Europeans. The climate of the island is said to be not very favourable to Europeans; the coast is hot, but in the interior, where the mountains in some parts rise to a height of 10,000 or 12,000 feet, it is much more temperate. The soil of the island is fertile, even for a tropical country; rivers, forests, and pasturage are abundant. The population are Malagasies and Hovas of Papuan, Malay, and Kaffir extraction. They are described as very intelligent, but indolent The higher functionaries affect a semiin the extreme. European mode of life, and the Queen reigns in a would be constitutional fashion.

Madagascar was known to the Arabs from a very remote period, and was visited in the thirteenth century by Marco Polo, the celebrated European who traversed China, and who gave the island its present name. After having been alternately used as a settlement by the French and Dutch, the island is now in a more or less independent position, though the French claim a right of suzerainty, which they would no doubt more energetically enforce but for the political exigencies which compel them to keep their powder dry for a possible struggle nearer home.

Newspapers are published in the island in the English, French, and Malagasy languages, and the European residents appear to take a fairly roseate view of life, for the latest issue of the principal journal which reaches us is filled with glowing descriptions of the festivities which took place in the island on June 20, in honour of Her Majesty's Jubilee; on July 4, to celebrate the anniversary of the Declaration of Independence of the United States; and again on July 14, the French national fête. The Europeans of the various nationalities, with some trifling exceptions, seem to celebrate these festive occasions with mutual goodfellowship, copious dinners, and a fine display of bunting and magnesium lights. They are evidently disposed to obey the precept—" Rejoice with those that do rejoice."

A knowledge of the French language would certainly be a great advantage to an intending British emigrant to Madagascar; as for Malagasy, the difficulties in the way of acquiring that language may be gauged from the simple fact that we find the word "gratitude" rendered by "ny toetry ny fony ny olona izay tahamaly soa."

# THE PHARMACEUTICAL CONFERENCE.

On Monday evening many pharmacists from all parts of the kingdom will meet in Manchester in "friendly reunion," as the constitution of the British Pharmaceutical Conference has it. This is the twenty-fourth assembly, the first having been held in Bath in 1864. There has been no previous meeting of the conference in Manchester, and so far as can be judged the meeting will be a successful one. The arrangements which the local committee have made for the employment of the time which is not to be devoted to the cultivation of pharmaceutical science are of an inviting character, and it appears certain that this part of the conference will give every satisfaction.

Mr. S. R. Atkins, the president this year, is well known as one of our most eloquent pharmacists, who from the earliest days of the conference has identified himself with the leading questions of pharmaceutical polity, and we may anticipate that his address will have reference to matters directly connected with the position and prospects of the pharmaceutical craft. Some weeks ago the special committee which was appointed at Birmingham to compile a formulary of non-official remedies completed its labours, and, we believe, drew up a report. No mention has been made of this in the programme, but in the natural course it falls to be submitted to the conference next week. The labours of this committee have been conducted in the privacy of the pharmacies of its members, and as the desirability or otherwise of publishing a formulary has had little consideration from the committee, the report will consist of practical details, or, in other words, working processes and formulæ for non-official preparations. This report is likely to be one of the principal topics of discussion. We may warn members not to be surprised to find few, if any, formulæ for purely proprietary preparations in the committee's list, and if after discussion the conclusion is again arrived at that imitations of such preparations should be included in the formulary, a standing committee, well supplied with money, will have to be appointed. Last week we published a preliminary list of the papers which have been promised, and, in accordance with our custom, we now add a few general comments on the subjects, and on others upon which papers have been promised.

The subject of a paper by Messrs. Flückiger Catha and Gerock. These are the leaves of a celas-Leaves. trineous shrub, Catha edulis, and were commented upon by Mr. C. B. Allen at an evening meeting of the Pharmaceutical Society in February last. The leaves and twigs are the khât, or cafta, of Arabia, where they are very largely used by the natives in a similar manner to what coca leaves are used by the Peruvian Indians. The drug is of a stimulating character, and appears to be used to minimise fatigue, and produces a pleasant exhilaration. Dr.-Paul has recently examined catha with a view to ascertain whether the drug contains caffeine or not, hitherto a disputed point, but his results were negative, and he came to the conclusion that an aromatic oil, and, probably, the tannin matters of the leaves, may be the bodies which induce the physiological effects.

Quinological Work.

Mr. David Hooper, the quinologist at the Government cinchona plantations, Nilgiris, Madras, again comes forward with a report of the systematic chemical work done in his department during the past year. In two previous papers contributed to the conference Mr. Hooper has given analysis figures of barks reared under different conditions, showing the effects of sunshine, renewing (by different methods), and manuring. He

has also given the results of the analysis of a complete tree and of cinchona ash, and has shown how the alkaloids increase with age. There are few subjects in pharmaceutical chemistry which are so interesting as the study of quinology, and these papers of Mr. Hooper's are welcome and valuable additions to this department of knowledge.

Although cantharidis (Cantharis vesicatoria) Vesicating is the only blistering-beetle sanctioned by the Beetles. Pharmacopæia, large quantities of other insects possessed of vesicating properties come into our market, and are legitimately used in the manufacture of cantharidin. The principal of the non-official kinds are the Chinese blistering-beetles (Mylabris cichorii and M. phalerata), which are said to be even more active than the official beetle. There are other species of this genus which possess vesicating properties, amongst them being M. oculta and M. Lavatera, which are found in South Africa. The uselessness of the red beetles which were recently placed on our market is ample testimony to the importance of examining other littleknown varieties, and Mr. Braithwaite's paper on the two African species will be of peculiar interest at the present

A paper on the chemistry and pharmacy of Morphine Morphine
Derivatives. some of the morphine derivatives is promised
by Mr. Dott and Dr. Ralph Stockman. Much of our knowledge of morphine, and the derivatives which can be obtained from it, is due to the researches of Matthieson. Mayer, Wright, Grimaux, and others. Matthieson and Wright are the discoverers of apomorphine, the only morphine derivative which has come into use in medicine; for, although it has been shown within recent years that codeine is a methyl derivative of morphine-and, it is understood, some commercial codeine is made from morphine—it can scarcely be placed on the same footing as apomorphine. There are many morphine derivatives—for example, the acetyl series, which may be valuable therapeutic agents; but hitherto little has been done with them further than examining them chemically. We trust that the paper by the two Edinburgh University workers will advance our knowledge in this direction.

This acid is an effectual prescriptive for Salicylic beers and wines weak in alcohol; but the con-Acid. tinued use of such "doctored" beverages is attended with pernicious results, and in France and other countries the use of the acid as a preservative is forbidden. It is somewhat difficult to detect the acid in wine owing to the presence therein of various bodies which affect the common reagent for salicylic acid (ferric chloride). The dialysis method, which is generally employed for detecting the acid in milk, is not suitable in this case, and the best results have been obtained by treating the acidulated wine with a suitable solvent—such as ether or light petroleum ether, separately or mixed-afterwards treating the ether with water, and applying the iron test. Mr. W. H. Ince, the assistantsecretary of the Conference, is to describe a new method for detecting and estimating the acid in wines and other liquids.

Blaud's Pills. Mr. T. Maben will read a paper on these pharmacists which have called forth so much difference of opinion amongst pharmaceutical writers as these; and, although the subject is almost threadbare, we anticipate a lively discussion on Mr. Maben's paper, which is one of the few pure pharmacy papers on the list. The points which writers generally aim at are the preservation of the iron in the ferrous condition, and the question as to whether the pills should contain the iron as carbonate or sulphate.

Pharmacy and Medicine.

Pharmacy and Therapeutics in Owens College, is to discussed by pharmacists that it will be refreshing to hear a representative of the higher order giving vent to his opinions before pharmacists. The immediate result will be a good discussion.

Logwood. Mr. Louis Siebold will contribute two papers, one on the chemistry of logwood, the other on its official preparations. The chemistry of logwood has been studied chiefly in regard to the use of the wood as a dyestuff, and we require more accurate knowledge regarding its astringent properties. The wood contains a tannin, a fatty resin, and a volatile oil. The tannin may be regarded as the active medicinal constituent. The decoction and extract are not elegant pharmaceutical preparations, and, if Mr. Siebold can tell us how to improve their appearance without diminishing their activity we shall have made a distinct advance.

This opium alkaloid was discovered in 1867 Cryptopine. by Messrs. T. and H. Smith and their manager, Mr. James Smiles. The alkalcid exists in opium in very small quantity (about 0.09 per cent.), and forms crystallisable salts the aqueous solutions of which possess the remarkable property of quickly becoming jellies. A 2-per-cent. solution of cryptopine hydrochloride is as stiff a jelly as a 2-per-cent. solution of gelatine. The salts which have been studied are the hydrochlorides (C21H23NO5HCl), one crystallising with five and the other with six molecules of water according to Hesse. The discoverers stated that the latter is an acid salt with two molecules of hydrochloric acid; but Hesse failed to corroborate this, and he also amended the formula of the alkaloid. Since his work on the subject, fifteen years ago, nothing further has been done, so far as we are aware. Dr. E. Kander now comes forward with some fresh information.

At the last conference Mr. H. W. Jones read Ipecacuanha. a paper on the estimation of emetine, in which he recommended F.ückiger's ammoniacal-chloroform process, although he had obtained equally good results by treating the powdered drug with lime and water, drying and exhausting with a solvent. The latter process he considered better adapted for preparations of ipecacuanha. Mr. Ransom, who had worked with Mr. Jones on elaterium, now takes up ipecacuanha; and, judging from his previous work in pharmaceutical chemistry, we may anticipate that he has found a process suitable both for the drug and its preparations.

English Rhubarb.

Mr. W. Elborne at the 1882 meeting of the Conference read an interesting paper on English rhubarb, describing the cultivation, harvesting, and the microscopical and chemical characters of the root. At least two varieties of rhubarb are cultivated in England—viz., R. rhaponticum and R. officinale, the annual crop amounting to about 12,000 lbs. English rhubarb is generally considered to be inferior to the official root in therapeutic activity, yet it is very similar in chemical composition. This is a point on which Mr. Elborn promised further information.

Nitrites and Nitroglycerine.

Dr. G. A. Atkinson, assistant to the Professor of Materia Medica at the Edinburgh University, has been studying the nitrites during the past three years, and has written many papers thereon, as well as a doctorate thesis for which his alma mater has awarded him a gold medal. His researches have been chemical, pharmaceutical, and physiological, and he

finds that the alkaline nitrites and nitroglycerine are the only reliable bodies of the class, spirit of nitrous ether and kindred bodies being unstable.

Aconitine. Last year Mr. John Williams described a method for preparing crystallised aconitine, which consisted in exhausting the root with spirit and tartaric acid, evaporating the tincture, treating with water to precipitate resin, then adding sodium carbonate, which precipitates amorphous aconitine, and this on being treated with ether yields crystals of aconitine. This process was at the time subjected to some criticism, and Mr. Williams is now to bring a new method before the Conference.

Another paper by Mr. Williams will be on Cocaine. the testing and purification of hydrochlorate of cocaine. In the manufacture of this important alkaloidal salt, it is a matter of considerable difficulty to get rid of an amorphous substance which is possessed of irritating properties and prevents the crystallisation of the pure hydrochlorate. Dr. Stockman recently examined the amorphous substance, and found it to be a mixture of "hygrine" and cocaine. He succeeded in separating crystalline cocaine from the amorphous substance. It is now generally considered that hydrochlorate of cocaine should be crystalline or granular. If either kind contains amorphous impurity, it may be detected—if in large quantity—by the peculiar odour; and, however small the quantity may be, there is no better test than Maclagan's ammonia test, with which we have had excellent results (CHEMIST AND DRUGGIST, vol. xxx. p. 297).

Mr. E. J. Millard will submit a paper on the Cocoaexamination of this substance. As one of the butter. most innoxious of fats, it is used in pharmacy chiefly for suppositories, and it is highly desirable that it should be free from impurity. The specific gravity and melting-point, which in the case of most fats give a fair indication of purity, are in this case unreliable, and Ramsperger states that if one part of a pure cocoa butter is dissolved in two parts by weight of absolute ether, and the solution cooled to 0° C., the butter crystallises out and leaves a clear solution. The butter is generally supposed to be free from uncombined fatty acids, but the observations of Dieterich (CHEMIST AND DRUGGIST, June 25, page 770) show that this is not correct.

Oil of Evodia.

This essential oil has recently been obtained by Mr. H. Helbing from the seed of Evodia fraxinifolia, a rutaceous plant of Nepaul. Mr. Hilbing finds that it is a good deodorant of iodoform, and for this reason he will bring it under the notice of the Conference. He obtained 3.84 per cent. of the oil from the seeds, and found it to have a specific gravity of 0.840. It is a light yellow oil, and possesses a pleasant and lasting odour, resembling a mixture of geranium and bergamot. Evidently the oil is one which should be better known, considering its intrinsic qualities and the large percentage of it which the seeds afford.

Strophanthus.

Mr. W. Elborne, who has received a grant from the Conference for the purpose of carrying on his investigation of this drug, will submit a report on the subject, and Mr. W. L. Scott will also contribute some notes. Next to quinine, strophanthus has the reputation of being the drug whose literature of the past twelve months is most voluminous. There are a great many varieties of strophanthus, but S. hispidus or S. Kombe is regarded as the plant which yields the seed, the weight of evidence being in favour of the latter. Professor Fraser has recently re-examined the seed, in order to lay at rest some suspicions regarding the existence of his glucoside strophanthin, and he has proved that it exists and is not crystalline.

This is a point upon which Mr. Elborne will have something to say. The other constituent of the seed which is most worthy of the attention of pharmacists is the yellowish-green to dark-green fixed oil, from 20 to 25 per cent. of which exists in, and which must be removed with ether from, the seeds before they are treated with spirit in making the tincture. This new remedy is a thoroughly established member of our materia medica, so that the sooner chemical investigators have wrenched the soul out of it the better. Even the formulary committee will have it under their care next week.

Spurious Cubebs.

Mr. W. Kirby, who has already given attention to the microscopic structure of certain spurious cubebs, will read a note on some other adultcrants. Amongst the false fruits which have been detected and not reported upon by histologists are a species of alpinia, rhamnus, and some other fruits, the origin of which has not been determined.

Camphor Oil.

On this subject Mr. Peter MacEwan will contribute a note. Large quantities of the oil are produced in Jaran, and exported to this country and to the United States. It is understood that much of this oil is of a worthless character. Mr. Moss read a paper on the subject at the Conference two years ago, and since then a Japanese chemist, Mr. Yoshida, has gone into the matter very thoroughly, showing that the true oil contains about a fifth of its weight of camphor, and half of its weight of a body which may be regarded as potential camphor.

Cali Beans. Recent scarcity of calabar beans has turned the attention of pharmacognosists to a new seed imported from West Africa, and derived from a papilionaceous plant. The seed resembles calabar bean closely, except that it is rounder; but, unlike other seeds of this character, which are occasionally called "calabar beans," the cali nut is valuable in that it contains an alkaloid identical chemically and in physiological action to physostigmine. Mr. W. L. Scott will tell the Conference of the probable uses of the drug in pharmacy.

Siegesbeckia Orientalis.

Mr. Scott will read a note in which he will speak of the organic principle contained in the leaves of this composite plant. If all that is said of this drug is true, it is a wonderful remedy for ringworm and other skin affections of a parasitic nature, and well deserves its name Herbe Divine. It will be remembered that in our reports of the Colonial and Indian Exhibition (CHEMIST AND DRUGGIST, May 8, 1886, page 406) we mentioned that Mr. Auffrey, a pharmacist of Mauritius, isolated from the leaves of the plant a bitter glucoside, to which he gave the name Darutyne.

Mackay Bean.

This is the seed of Entada scandens, a leguminous plant indigenous to Queensland, and also known as the sea-bean. Mr. John Moss will read a note on it. We are not aware that the seeds have been put to medicinal use, but as they are large (about two inches across) and hard, they are made into spoons and similar useful articles. The natives of North Queensland also use them as food, after they are baked, pounded, and steeped in water for twelve hours. It is noteworthy that some Queensland leguminous sceds differ in some important respects to other seeds of the order, and Dr. Bancroft has found saponin in one (CHEMIST AND DRUGGIST, July 23, page 94).

Two other papers are promised, one by Dr. C. R. C. Tichborne on "Some Fundamental Errors in the Pharmacopoeia," and another by Mr. Helbing, entitled, "Pharmaceutical Notes on some Synthetical Compounds recently introduced into Medicine." We learn that Mr. A. H. Allen has withdrawn his paper on "Carbolic Acid."

## Trade Report.

Note to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., August 25.

THE week has been a rather quiet one, although in several articles a fair business has been transacted and various alterations have occurred in quotations. At the drug sales held tc-day the tone was a fairly lively one, and a considerable proportion of goods was sold. Senna engaged by far the most attention, the quantity catalogued being almost unprecedentedly large, and the sale, by 3 to 5 bales at the time, and sometimes less, occupied over two hours.

Among the principal features of to-day's sales, apart from the senna, which sold at a slight advance for the common and medium qualities, are a sharp advance in musk, and a further sale of a large quantity of Curaçao aloes at low rates. Cardamoms are steady, cubebs dearer, and rhubarb sold without appreciable change. Ipecacuanha has had a fresh tumble. American peppermint oil is again about 6d. cheaper. Opium, morphia, iodine, and quicksilver firm. Jamaica sarsaparilla slightly lower. In shellac a better tone prevails, and gum arabic has sold at an advance in several varieties. Heavy chemicals are generally steady, but salammoniac and sulphate of ammonia are cheaper. Sulphur may shortly advance slightly. Citric acid is steady, and lemon-juice has advanced in Italy. Bleaching-powder and cream of tartar are steady.

ACID (CITRIC) is somewhat firmer, say at 1s.  $8\frac{1}{4}d$ . to 1s.  $8\frac{1}{3}d$ . per 1b. on the spot; in auction 4 casks Kemballs' brand were held at the latter price, 1s.  $8\frac{1}{4}d$ . being refused. Privately there is little business doing. Lemon juice is advancing; 25l. f.o.b. is reported to have been paid to-day.

ACID (TARTARIC) quiet but firm, at 1s.  $6\frac{3}{4}d$ . for foreign, and 1s.  $7\frac{1}{2}d$ ., nominally, for English.

ACID (OXALIC) remains very quiet at 4d. per lb. Sal acetos firm at 6d, with small transactions.

ALOES.—There was only a small quantity of Cape aloes offered at to-day's auctions, and though it was asserted that prices were likely to rise owing to scarcity, no advance at all was apparent at the auctions. Of 36 cases only 14 were disposed of, good bright at 27s. to 28s, drossy at 20s., per cwt. The offerings of Curação aloes were again abundant, consisting of 609 packages, and prices showed a further decline, holders selling freely. Five boxes fair palish liver sold at 82s. 6d., but the bulk was of a very ordinary drossy character, and sold at prices ranging from 24s. for ordinary Capes, to 2s. per cwt. for rubbish. A consignment of bold gourds, imported viâ Hamburg, quite common quality, fetched 10s. to 10s. 6d. per cwt., being cleared out by two or three lots at a time. East Indian aloes sell very well indeed, fine red in tins, 140s. per cwt.; brown ditto, 100s.; good bright to dark hepatic in skins, 92s. 6d. to 77s. 6d.; ordinary black, 40s. Ten kegs rather dark Socotrine went at 6l. 15s. per cwt.

ALUM continues to sell at unchanged rates—viz, loose lump, 5l. 10s. per ton; ground, in bags, 6l. per ton.

AMBERGRIS.—Seven tins were offered under this name. For common black undeveloped stuff 35s. is required. Eightyfour ounces rubbish sold "without reserve" at 12s. 6d. per oz., for export to France in all probability.

AMMONIA COMPOUNDS.—Carbonate remains very quiet at 4d. per lb., with a good discount. Sal ammoniae has been

reduced 2s. per cwt., and at the lower rates a good business has been passing. Firsts now stand at 34s., seconds at 32s. per cwt. In Sulphate the recent quotations have not been maintained, and while a considerable business has been done during the past three weeks for August-September delivery, it has been at declining prices. It became apparent that the extreme prices at which holders were aiming could not be realised, and of late there has been a good deal of anxiety to secure orders. The demand has come almost entirely from Germany. In France and Belgium there has been no activity, while the demand for home consumption has been at its lowest ebb. While good grey at Hull is still quoted at 12l. 11s. 3d. to 12l. 12s. 6d. for prompt delivery, other makes are quoted as follows:—London makes on basis of 25\frac{1}{4}, yellow, 12l. 2s. 6d. net; London good grey, 24 per cent., 12l. 10s., less 2\frac{1}{2} per cent. For September-October delivery considerably lower prices would be accepted.

ANISE.—A few lots rather dirty Russian seed, mixed with coriander, were bought in at 26s. per cwt. In China Staranise is reported to be liberally offering, but there is no export demand.

Annatto.—A few lots good bright seed from Ceylon sold cheaply at  $2\frac{1}{2}d$ . per lb. Five bags common damp black seed from the same quarter could not find a buyer even at  $\frac{1}{8}d$ . per lb. It is a pity that such lots should be offered at the sales. The owner of 15 baskets fine bright Pará roll, who has frequently offered that lot at the sales, still asks too high a price. The parcel was again bought in at 2s. nominally.

ARSENIC moves off steadily, and the price is firm at 11s. 6d. per cwt. for powdered white landed.

BAEL FRUIT.—Ten bags low discoloured fragments sold "without reserve," at  $\frac{1}{2}d$ . per lb., "if they pay charges," which is questionable. Another lot wormy quarters was bought in at 3d. per lb.

BALSAMS.—No inquiry exists for any of the usual varieties. *Peruvian* balsam is still held at 4s. 6d. per lb., although nominally more is asked; *Canada* balsam is worth from 1s. 5d. to 1s. 8d. per lb. *Tolu* and *Copaiba* neglected.

Belladonna Root.—The low prices ruling last year have caused a smaller quantity to be collected in Germany, and good quality is scarce and dear.

BLEACHING-POWDER is scarce on the spot, and sells steadily at  $8l.\ 15s.$ 

BORAX.—A fair trade is being done at second-hand prices of about 28*l*.; but the makers still hold on firmly at 30*l*. to 32*l*. according to brand.

BUCHU very quiet. A few lots were offered at to-day's auctions, but no sales occurred. Sixteen bales round leaves, rather yellow and stalky, were bought in at  $3\frac{1}{2}d$ . per lb.; long dull and broken at 10d. per lb. nominally.

CALUMBA.—449 bags were offered for sale to-day, but there was not a single lot of fine root among them. Nearly the whole was bought in at 14s. to 16s. per cwt. for dusty small and partly wormy root; but 56 bales dull root mixed with some yellow pieces sold at 13s. to 15s. "without reserve." A parcel of 252 bags is just being landed. We hear that there has been a very good Continental demand for picked root lately.

CANELLA ALBA.—Fine quill is not offering, and lower grades are neglected. Nineteen bales thin broken quill, rather brown, are held at 20s. to 21s. per cwt. for sound to damaged.

CANNABIS INDICA.—None was sold, and the article remains extremely neglected. 31 bales fair greenish tops, partly dusty, are held at  $2\frac{1}{2}d$ . per lb.; dust and stalk, at 1d. per lb.

CARDAMOMS.—The bulk of the 150 cases, a rather small supply offered to day sold at full prices, in a few instances a shade above valuation, but on the whole without quotable change. The following prices were paid:—Ceylon Malabar: fine, none offered; good plump yellowish, medium to bold 1s. 9d. to 1s. 10d.; medium ditto 1s. 7d., small yellow plump 1s. 5d. to 1s. 6d., fair medium, pale long 1s. 6d, small to medium dull and skinny 1s. 4d., very small yellow 1s. 3d., brown, mixed specky and skinny, 1s. 2d.; small, badlybleached, &c., 9d. to 1s. True Malabar, bold and plump,

but brownish, 1s. 3d. to 1s. 5d.; very ordinary shelly Tellicherry, 2d. per lb.; seed, 1s. 4d. to 1s. 6d. per lb. A few cases Mangalore, C mark, but not of very desirable quality, were bought in at 3s. to 3s. 6d. per lb. nominally. The Ceylon exports from October 1 to July 28 are given as follows:—1886-7, 287,504 lbs.; 1885-6, 206,141 lbs.; 1884-5, 130,288 lbs.

CASCARILLA.—76 packages fair quill, slightly silvery, but rather broken and dusty, were brought in at 24s. to 25s. per cwt. This article is now cheap.

CASSIA FISTULA.—A few packages very thin lean West Indian pods sold at 8s. 6d. per cwt. "if pay charges," while 3 cases lean and wormy East Indian pods found buyers at 16s. per cwt.

CHAMOMILES .- On Wednesday the drop made further progress, and to-day good new flowers of the second pickings changed hands at 51. per cwt., while other holders are offering at 51. 10s. per cwt. English chamomiles are inquired for, but almost unobtainable. Our anticipation that the excessive rates quoted last week for new Belgian flowers would not be maintained has quickly been realised. On Tuesday a heavy drop took place in the article, fine new flowers, for which previously 71. 5s. per cwt. had been quoted, being now offered at 61. per cwt. without finding purchasers. A Brussels wholesale druggist, who evidently takes a bullish view of the situation, writes us under date of August 24:—"The Belgian crop this year, owing to the excessive drought which has prevailed, will scarcely yield one-fourth of that of 1886, and no more than 40,000 or 50,000 kilos. will now be gathered, against an average crop of 150,000 to 200,000 kilos. The last gathering, which is generally collected at the end of September, is this year about four weeks in advance, and is being collected now; its quality is extremely lean. It is thought that the price will advance still further, as many buyers have not been willing to pay the high prices demanded, and the bulk of the consumers are as yet without their usual stock. The last gathering which is now being collected is being sold à la baisse, but flowers of the first and second gatherings are very scarce, and once the last gathering is disposed of—say in eight or ten days—prices may rebound."

CINCHONA.—A large quantity of South American Crown bark was offered to-day, but did not meet with much attention, and only a few were sold; Loxa, very broken to fair silvery, at 10d. to 1s. 5d. per lb. Two bales spurious flat yellow Calisaya, soft and broken, sold at 1s. 3d. per lb. The following is the present general range of prices of South American bark:—

	1887					1886			
		S. 6	7. s.	d.	8.	d. s. d.			
Calisaya, flat	per lb.	0	6 to 1	2	1	0 to 2 0			
quill	,,	0	9 ,, 1	0	1	2 " 2 6			
Crown, Loxa	,,	0	4 " 2	6	0	5 ,, 1 10			
Grey (Huanuco)	• • ,,	0	4 ,, 1	6	0	4 ,, 1 5			
Maracaibo	,,	0 3	L½ " 0	3	0	3 ,, 0 6			
Pitayo, hard	,,	0 :	$1\frac{1}{2}$ ,, 0	3	0	2 ,, 0 8			
Red, flat	,,	1 (	, 10	0	1	6 ,, 6 0			
quill	•• ,,	1 (	0 " 3	0	1	0 ,, 3 6			
Cuprea	• •	0	2 " 0	9	0	2 " 0 11			

The French official returns of the movements of cinchona bark in that country between January 1 and July 31 give the following results:—

			1885	1886	1887
Imports,	to July 31	 to:	ns 495	789	545
Consumption,	,,	 ,,	430	396	3 <b>7</b> 4
Exports,	**	 •	175	159	107

The exports from Ceylon continue to fall steadily, although very slowly as compared to last year, but it is still possible that from now until the end of the season the difference may be made up, especially as the Ceylon shipments during August and September last year were comparatively small. At present the figures stand as follows:—

1886-7 1885-6 1884-5 October 1 to July 28 .. lbs. 12,111,993 13,349,851 9,394,468

The latest mail advices from Colombo report a very dull market.

CINNAMON remains very firm at the recent advance. At

the end of last week business was reported at  $10\frac{1}{2}d$ . per lb. c.i.f. for arrival, usual assortment, and  $11\frac{1}{4}d$ . for firsts and seconds. The exports of cinnamon from Ceylon in the period between October 1 and July 28 are given as follows:—1886-7, 1,179,604 lbs.; 1835-6, 1,208,826 lbs.; 1884-5, 1,104,308 lbs.; 1883-4, 1,267,826 lbs. The imports into London from January 1 to July 31 were—2,156 bales in 1887; 3,447 in 1886; and 3,134 bales in 1885; the deliveries, respectively, 5,464, 4,708, and 5,974 bales; and the stocks on July 31, 3,636, 4,713, and 4,227 bales.

CINNAMON CHIPS.—At the auction yesterday, 249 bags ordinary new Ceylon sold at  $2\frac{5}{8}d$ , per lb. The exports of cinnamon chips from Ceylon between October 1 and July 28 are — 1886-7, 432,549 lbs.; 1885-6, 481,401 lbs.; 1884-5, 601,127 lbs.; 1883-4, 453,448 lbs.

CIVET.—Three horns of ordinary quality were offered and are held at 8s. per oz., 7s. 6d. per oz. having been refused. Fine quality is still scarce, and high rates are asked.

COCAINE very quiet at the recent quotations. Seven packages crude cocaine were landed this week from South America.

COCHINEAL very quiet. Best black Teneriffe is held at 1s. 5d. per lb.

CREAM OF TARTAR.—The small supplies which we receive from France and Spain are sold as they arrive, and the article remains extremely firm at 129l. 10s. to 130l. per ton for cream, 118l. to 120l. for yellow, and 107l. 10s. to 110l. for brown and grey.

CUBEBS.—Several small lots were offered, and sold at an advance over the last prices paid privately. A small consignment imported directly from Batavia, mixed with bold grey berries, and rather stalky, was well competed for, and knocked down at 211.5s. per cwt., bidding having commenced at 181.5s. Three bags very small shrivelled berries, slightly mixed with the bold grey one-celled fruit, and extremely stalky, sold at 161.10s. per cwt. Seven cases (each 200 lbs.) "cubeb powder"—the same lot to which we have previously drawn attention—were bought in at 71. per cwt.

DIGITALIS.—In Germany prices are lower, the yield being an abundant one.

DRAGONSBLOOD.—Only 2 cases bricky old slabs of inferior colour were shown. They are held at 75s. per cwt., 72s. 6d. being refused.

ELATERIUM.—Sales of 78 ounces new *Malta* in small cakes, rather green in colour, have been made at 2s. 6d. per oz. Three boxes of that parcel remain unsold.

ERGOT OF RYE.—Six cases *Spanish* ergot, guaranteed sound, are held at 1s, per lb., owners appearing very firm. An offer of 10d. per lb. was refused for this lot. Two other parcels old Spanish ergot were bought in at 1s. 6d. per lb. nominally, but much less would be taken, no doubt.

GALLS remain quiet at 56s. to 57s. for *China*, 52s. 6d. to 54s. for *Japan*, 54s. to 57s. for blue *Turkey*, and 45s. to 50s. for white and green ditto. At auction six bags fair green sold at 46s. per cwt.

Gambier.—Fifty tons mercantile block have been sold at 21s.  $7\frac{1}{2}d$ . per cwt. for arrival, per September-October. On Tuesday 24 bags Malacca pressed strip in block sold by auction at 29s.

GAMBOGE.—Fourteen cases partly run and broken pipe, good in colour, were bought in at 10t. 10s. per cwt. Two cases fairly good old blocky pipe sold at 9t. 15s., about the valuation; two others of this parcel are held at the same price.

GENTIAN ROOT.—Twenty bags very good root from Bordeaux sold to-day at 16s. 6d. per cwt. Privately 16s. to 16s. 6d. is asked, according to quality.

GUM AMMONIACUM remains extremely neglected, and low prices would be accepted, though holders do not show any inclination to go below the decline already established at recent auctions. For good pale loose seedy grain 23s. per ewt. was refused, while good small yellow siftings were bought in at 22s. per cwt.

GUM ARABIC.—The better classes of gum are still very scarce, and in some instances slightly higher rates have been

pail. At last week's auctions Australian gum was chiefly sold at fair prices, though in some cases a little under valuations; good pale frosted at 75s. 6d., and fair gum at 63s. to 67s. per cwt. In Barbary gum we do not hear of any business, either in Amrad or brown gum. Fine selected parcels of Cape gum continue to sell well, but ordinary lots are difficult to dispose of. As regards East Indian Gums, Aden is in fair demand; a parcel lately arrived of fair quality was bought in at auction, and has since been sold at 6l. per cwt. Of Amrad good quantities sold after the sales at the full price of 60s. to 67s. 6d. per cwt. Ghatti was in good supply and holders were very firm, but a considerable quantity changed hands at and after the sales; fair to good at 60s. to 67s. 6d, pale at 73s., and one or two lots of very superior at fancy prices, also a parcel of ordinarymiddling gum at 46s. to 48s. per cwt. Of Egyptian gums, a small parcel of low Amrad has been sold cheaply at 32s. 6d. per cwt. Ghezira has been in more request, 87s. 6d. having been paid. In to day's sales 43 bales of very good quality were bought in. Turkey Sorts are at 5s. 10d. per cwt. firmly held, our stock being very small. In sale to-day 1 case ordinary grey picked sold at 14l. 17s. 6d. per cwt. The stock of Senegal gnm here is almost exhausted; retail sales of Galam have been made at 7l. per cwt.

GUM BENJAMIN —A fair assortment, consisting altogether of 116 cases, was offered at to-day's auctions, but the demand is practically dead. Of Siam gum nothing was sold; fine loose bold almonds were bought in at 271., second size at 251., and blocky siftings at 181. per cwt. nominally. Of Sumatra gum, well packed, in fine bold pale almondy block, a few cases were bought in at the low price of 101. 10s. per cwt. Two cases fair brown seconds, rather almondy but somewhat false packed, sold at 71.

GUM COPAL.—Manila remains quiet, with sales at auction of 120 packages dark chips at 24s. 6d. to 26s.; blocky ditto at 16s., and drossy pickings at 10s.

GUM ELEMI.—Fine white *Manila* sells at the recent advance. In sale 20 boxes out of 66 sold at 34s. to 35s. for good white.

GUM GUAIACUM — Five cases were offered, of which two sold at 7d. per lb. for dull block. Fair block is held at 1s. 3d. per lb. nominally.

GUM MYRRH.—To-day there was a much better inquiry than at the last sales. Altogether 56 packages were offered, the greater part of which sold briskly, though with no improvement in price. Aden picked good new, but slightly blocky, went cheaply at 7l. to 7l. 2s. 6d.; another lot good free picked was bought in at 8l. 10s., but less would be accepted. Good pale elder sorts sold at 95s., bold siftings at 82s. 6d. to 87s. 6d, small pale siftings at 65s, dark and blocky pickings at 30s. to 40s. per cwt.

GUM OLIBANUM.—The supply is considerably larger than the demand, and at the last auctions a reduction of 1s. to 2s. per cwt. was accepted in order to sell, although even then only 207 cases out of the 875 packages offered sold. Bombay, fair reddish drop, 43s.; red badly garbled sorts, 41s. 6d. to 42s.; ordinary small and rather blocky ditto, 38s.; fair garblings, 15s.; siftings, 13s. to 13s. 6d.

GUM OPOPONAX.—Two boxes were again offered, one containing 15 lbs. loose pieces, partly drossy, partly fine almondy; another of 6 lbs. siftings. For each of these 21s per lb. is required, but no bid was forthcoming.

GUM TRAGACANTH.—Of 1,157 packages offered at auction last week a small proportion *Syrian* sold: Seconds to firsts and seconds mixed, 7*l*. 15*s*. to 10*l*.; thirds, 6*l*. to 7*l*.; pickings and hog gum, 48*s*. down to 25*s*. for brown and glassy, mixed with stones.

HENBANE.—In Germany fine qualities are inquired for at high prices. The yield of henbane in that country is becoming less every year.

HONEY.—No change has occurred in the market, and the article remains neglected at the recent quotations, At auction to day 215 cases *Californian* good hard white to brown were bought in at 30s. per cwt.

INSECT FLOWERS.—It is said that the Dalmatian crop has been a favourable one, but that the farmers keep back their supplies in order to force up the market. Lower prices are expected to rule in the autumn.

IODINE.—No change has occurred in the position of this article. All iodides still remain at our last quotations.

IPECACUANHA.—The Kestrel brought us 86 packages this week, and the Falcon 10 more, both viâ Antwerp, so that our supplies are now abundant. Under these circumstances the 31 bales offered to-day did not meet with much inquiry, and only 8 sold, at a fresh decline of 4d. to 6d. per lb; good sound annulated at 4s. 6d.; damaged ditto, 4s. 5d.; mouldy ditto, 4s. 4d.; thin and wiry, at 4s. 3d. per lb.

JALAP.—Privately a fair business is said to have been done at the late advance. In sale 16 bales Vera Cruz were bought in at  $7\frac{1}{2}d$ . per lb.

KAMALA remains neglected. It is now some time ago that this article was offered at auction, but the price fails to improve. Eight cases were all bought in, dull and brownish is held at 1d. per lb.

KOLA NUTS.—One box of 50 lbs. sold at 9d. per lb.

LEAD (ACETATE) selling at 26s. 6d. per cwt. for best white foreign. The demand is not quite so brisk, but supplies are still very meagre.

LIME JUICE in good supply. A few packages Jamaica, containing about 20 per cent. mucilage, sold at 1s. 2d. to 1s. 3d. per gallon, slightly lower; another parcel was bought in at 1s. 7d. to 1s. 8d. per gallon, a good deal beyond the value.

MORPHIA without change, makers still asking 7s. 6d. per oz.

MUSK.—Our supplies have now run extremely short, and the last China steamer did not bring any. Of Tunquin pod musk, first pile, only 8 tins were offered. Five of these were bought in at 100s per oz, but 92s, was named as the price. The pods are rather small, well-trimmed, with fine blue skin and underskin, but somewhat weak in flavour. Three other caddies, thin skin and underskin, small to bold pods, somewhat damp inside and several pods broken, were apparently sold without competition at the extreme price of 95s, per oz, which would be an advance of 7s. 6d. per oz.; very fine but adulterated third pile sold at the high price of 63s., badly trimmed and damp ditto at 30s per oz. Fair Nepaul grain is held at 60s., while fair to good Assam grain sold at 47s. 6d. to 53s. per oz.

MUSK SEED.—Six cases good Java seed of strong flavour were bought in at 1s. per lb. nominally, and weak-flavoured West Indian seed at 6d. per lb.

OILS (ESSENTIAL).—Star anise has not made any improvement; 7s. 4d. per lb. is still the nearest price. China markets are reported to be very quiet now. Camphor oil 40 cases brown coloured were bought in at  $2\frac{1}{2}d$ . in sale. Cassia oil neglected at 2s. 8d. per lb. We hear from China that dealers there are offering liberally, and would be disposed to make concessions. Several percels Cinnamon oil were offered to-day. Fine heavy gold-coloured Canowenne is held at 3s. 6d. per oz.; other brands at 1s. 8d. per oz. From October 1 to July 28 only 54,501 oz. of this oil were shipped from Ceylon, against 82,948 oz. in 1885\_86, and 95,994 oz. in 1884\_85. Cinnamon leaf oil is held at  $1\frac{1}{2}d$ . per oz. Of *Eucalyptus globulus* 9 bottles at 30 lb. each were bought in at 3s. 6d. Oil of Cloves, English drawn, is quoted at 6s. 9d. per lb. Citronella.- The market has been reported a shade s eadier on the spot, say at  $\frac{31}{30}d$ . per oz, but for forward delivery there are no buyers even at 57s. 6d. per case c.i.f., nor is this surprising considering the vastness of the shipments from Ceylon, which, between the periods of October 1 and July 28, have been: -1886-87, 6,865,386 oz.; 1885-86, 5,086,230 oz.; 1884-85, 4,918,394 oz. English lavender is likely to be cheap this year; the price of the French oil has not yet been fixed. Five cases of 2 tins West Indian oil of limes, newly imported, sold with very good competition at from 3s. 11d. to 4s. per lb. Five more cases are held at 3s. 11d. Lemongrass foil is offering, without success, at  $1\frac{2}{3}d$ . per oz. on the spot. For good unworked nutmeg oil  $4\frac{1}{2}d$ . per oz. is asked, an offer of  $4\frac{1}{4}d$ . being declined. Oil of peppermint, H.G.H. brand, is offering on the spot at 13.6d per lb, a fresh decline. English oil will be dear this year. In Germany the crop of peppermint has severely suffered from drought, and will not exceed one half of a normal yield, but the quality is exceptionally good. Japanese oil is still plentiful and cheap. Three cases American *spearmint* (H.G.H.) were bought in at 28s., while 24s. was suggested as the price. Nine bottles very fair *Ylang-ylang*, which have been offering for a long time, sold at 6s. 9d., "without reserve," a very low price, though the brand is not a well-known one.

OILS (FIXED).—Two cases sweet oil of Almonds, from Venice, sold at 9d. per lb. Castor oil remains steady for the fine qualities: Italian, 4\frac{1}{4}d.; first Calcoutta, 4d.; but for medium grades a small reduction is accepted, which bas led to a large business. Cocoanut oil steady at 23l. 15s. to 24l. 10s., according to packing, for Ceylon; 30l. to 33l. for Cochin, and 26l. for Mauritius. Cotton-seed oil slightly weaker for crude, viz, 19l., but steady for refined, at 20l. 15s. to 21l. Linseed oil bas declined, but closes steadier again, at 20l. 17s. 6d. to 21l. 2s. 6d. Palm oil dearer, at 22l. for fine Lagos. Rape oil improving slowly. English brown, 22l.; refined, 23l. 5s. to 23l. 10s. Turpentine cheaper, at 25s. 6d. to 25s. 9d. for American spirit on the spot.

OPIUM.—According to the latest mail advices from Smyrna the market at that port showed rather more animation at the close. During the week ending August 12 about 25 cases had been sold at the parities of 16s. 5d. per lb. for old damp Karahissar, 17s. 8d. tor Jerli, tel quel, and 18s. 2d. to 19s. per lb. for Bogaditz. The whole of this has been sold for exportation. Old opium was slightly lower in price, owing partly to the necessity of realising experienced by some holders. The arrivals for the season up to August 12, as compared with 1886, have been—

 At Smyrna
 Salonica
 Constantinople

 1886
 ...
 cases
 1,530
 390
 500

 1887
 ...
 "
 203
 324
 192

Sanguine operators at Smyrna anticipate that the average price of opium this season will rule at 21s. per lb. The Smyrna market is lower in consequence of some bolders selling old stuff. In London bolders are firm and waiting for the Dutch Trading Company's order to Smyrna before operating. Malatia has been sold, it is said, at 21s. per lb.

ORANGE-PEEL.—Old *Malta*, fair tbick cut, rather dark in colour, is held at 8d. per lb.; 10 bales very common old brown sold at \(\frac{1}{2}d\). per lb., without reserve.

PLASTER OF PARIS.—One keg was offered, but bought in witbout mention of price.

POPPIES.—The gathering of poppies in Lincolnsbire has now been almost completed. The capsules are below the average in size, but unusually fine in colour at present. Ten days of suitable weather will see them all on the drying floor, and a good many of them fit for delivery. Growers are asking large prices.

QUASSIA WOOD.—Prices bave lately ruled so low as to cause an almost entire cessation of imports, and it would seem that nothing is expected in the near future. Under these circumstances it is thought that values will ere long commence to advance again.

QUICKSILVER steady at 7l. 5s., importers' price. All Mercurials unchanged since last week.

QUININE.—It is said that there is a slightly firmer feeling in the market, 1s.7d. per oz. having been refused for German in bulk, but we do not perceive any improvement. At the auctions, of 5,000 oz. Whiffen's, in bulk, one lot sold at 1s.7d. per oz. 2,000 oz. (in 100-oz. tins) of the Wedmore Quinine Company's make, of which sales have occasionally been made privately, were also offered. From 1s. 6d. to 1s. 7d. per oz. was bid for these, but the owner would not part under 1s. 7½d., and the lot was bought in. The firm of Böhringer & Sons have secured, by public tender, a Russian contract for 25,200 cz. quinine sulphate at the parity of 1s. 8½d. per oz., and 30,000 oz. hydrochlorate at 2s. 1½d.

RHUBARB.—There was comparatively little offered to-day, and the demand was restricted, but some lots changed hands without quotable change in value. Shensi, round medium, fairly well trimmed, half fair fracture, at 1s. 9d.; wormy orange coated, round, fair fracture, 1s. 2d.; flat, good appearance, medium, well trimmed but dull in fracture, 1s. 3d. Canton, wormy, small to medium, dull grey fracture and coat, together with some old bigb-dried root, at 6d.; High-dried, flat, good colour, but very spongy, 7d. to 8½d. (without

reserve). Shensi high-dried, wormy pickings,  $8\frac{1}{2}d$ . per lb. A good proportion of our large stock has lately been taken out of the warebouse, and there is little coming in.

SAFFRON.—Best *Valencia* is quoted at 56s. perlb. Notbing is yet known concerning the new crop.

SARSAPARILLA.—Good grey Jamaica root sold at a decline of 1d. per lb., viz., 1s. 9d. for sound and 1s. 8d. for damaged; grey Lima-Jamaica, in bundles, at 1s. 5d. per lb.; and some ordinary Honduras at 1s. per lb.

SENNA.—The sale of an enormous quantity of Tinnevelly senna, of which no less than 1,037 bales were catalogued, occupied a considerable time. The bulk of the quantity offered consisted of middling and fair leaves, with a good proportion of utter rubbisb, which nevertbeless sold briskly; common and medium grades realised  $\frac{1}{4}d$ . to  $\frac{1}{2}d$ . per lb. above valuations, fine qualities sold steadily. The Kaisar-i-Hind brought us another 502 bales Tinnevelly this week. The prices paid to-day were:—Superfine bold green leaf 11d. to  $11\frac{1}{2}d$ ., very good to fine ditto  $7\frac{1}{2}d$ . to 9d., fair greenish to good  $6\frac{1}{4}d$ . to 7d, medium partly damaged to fair  $3\frac{1}{2}d$ . to 5d., ordinary blackish to very common  $2\frac{3}{4}d$ . down to  $\frac{1}{2}d$ . per lb. Alexandrian senna is a dead letter just now.

SHELLAC.—A better feeling bas been manifested this week, second *Orange* lac closing from 6d. to 1s. per lb. dearer. At the sales on Tuesday 130 chests out of 496 catalogued found buyers "without reserve." DAC in triangle, unworked, Calcutta weight, 42s. 6d. to 43s., and dark *Button* third at 36s. per cwt. Privately from 43s. to 44s. bas been paid for second *Orange* since then. TN lac is not offering forward.

SODA COMPOUNDS.—Ash,  $1\frac{1}{6}d$ . per degree; Bicarbonate steady at 6l. 12s. 6d. to 6l. 15s.; Caustic cream, 7l. 10s.; white 60 per cent., 7l. 15s.; Crystals, 52s. 6d. in London and 45s. 6d. on the Tyne; Nitrate, 8l. 15s. to 9l.

SPICES (VARIOUS).—Arrowroot remains very neglected. A large supply was again offered at the spice sales this week, but only a small quantity St. Vincent was sold; ordinary to good at 1½d. to 3d. per lb. Bermuda arrowroot bought in at 1.8. 6d. per lb.; 110 bags from Queensland were also bought in at 2¼d. per lb. Cayenne Pepper bas been sold at 1s. 3d. for newly-imported Natal. Of Chillies 18 bales fair but slightly sea-damaged Zanzibar sold at 28s. 6d. per cwt. Cloves are somewbat weaker again, with sales of fair Zanzibar at 10½d. per lb. Ginger is very firm for Cocbin, while the better grades of Jamaica bave made an advance of about 5s. per cwt., and are in brisk demand.

SULPHUR in moderate demand; prices are tending upwards on account of the scarcity of raw materials; flowers 8s. 6d. to 10s. per cwt.; rolls, 7s. 6d. to 9s. per cwt., according to brand.

TAMARINDS.—Small sales have been made at 11s. for Antigua, and 13s. to 15s. for Dominica.

TURMERIC.—A beavy supply was offered on Tuesday, and mostly bought in. Of 500 bags Bengal, 50 bags sold at 10s. 9d., being lower. Of 1,528 bags Madras, 200 bags sold, bright yellow mixed finger and bulbs, 7s. 6d. to 7s. 9d.; ends, 7s. 6d.

VALERIAN ROOT.—The Belgian crop is an entire failure, it is said, owing to the drought. The average quantity collected is from 75,000 to 80,000 kilos., but this year there will scarcely be 20,000 kilos.

Vanilla.—Sixty-nine tins were catalogued and sold, partly at irregular, but generally lower, rates; 8 incb 19s. 6d., 7 by  $7\frac{1}{4}$  inch 18s., 5 by  $6\frac{1}{2}$  inch 15s.,  $5\frac{1}{3}$  by 6 incb, 13s. 6d., 5 by 6 inch 10s., 5 by  $5\frac{1}{2}$  inch 9s. 6d.,  $4\frac{1}{2}$  by 5 inch 8s. Twenty-nine tins in one catalogue included 13 tins from Bombay, for which 15s. was asked, but no bid made. The pods are long, dry and brown, and have the appearance of being stretched; the vanilla is probably the product of Madagascar, and is certainly not carefully cultivated. We notice the arrival, per Reva, of a case of vanilla from Ceylon.

WAX (BEES').—Several parcels sold, mostly Jamaica; fine pale orange 5l. 10s. to 5l. 12s. 6d, good grey and orange 5l. 5s. to 5l. 7s. 6d., dull dark and drossy 87s. 6d. to 90s.

WAX (JAPAN) is about 4s. dearer, 50s. having leen paid for fine white squares.



#### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

#### The Use of Brokers.

SIR,—I notice Mr. Greenhough's letter in your issue of August 20, which does not, however, dispose of the question, because it makes no distinction between genuine, intelligent, and reliable brokers and sham brokers.

It is well known in the Lane that the bulk of the brokers are anything but brokers. The system is wrong, but the merchants are themselves partly to blame for this state of

things.

Mr. Greenhough's assertion of "wild talk" in the face of Mr. Pickering's own admissions, and the well-known fact in the market that Mr. Pickering operated largely for a fall, is really cool. Mr. Greenhough himself is not free from reproach as a broker, for as a sworn broker he is morally bound to abstain from business transactions on his own

Mr. Greenhough has the effrontery to throw a doubt upon my sworn evidence. May I appeal to his well-known liberality (?) and ask him to give ten guineas for the benefit of a charity against proof, by my books, that I acted in the case in question strictly as the confidential agent of a principal? Yours truly,

3 Cross Lane, London, E.C.

#### DANIEL MAGNUS.

#### Breakdown of the Irish Pharmacy Act.

SIR,-Your article on the working of the Irish Pharmacy Act in Saturday's issue calls for some remarks, as it is evidently founded upon a very superficial reading of our very imperfect Act, and certainly does not do justice to the Council of the Pharmaceutical Society of Ireland.

Nothing would afford that body greater satisfaction than to be able to form the same opinion that you do, as to its power to frame a register of chemists and druggists in busi-

ness at the passing of the Act.

As I think I can show you, it has no such power.

The original Council under the powers given it by Sec. 15 decided at their first meeting to establish the grade of pharmaceutical chemist only, and that decision having received the approval of the Privy Council has (sec. 17) the same force and effect as if enacted in the Act.

Sec. 19, which you appear to ignore entirely, then comes in, which enacts "that so far as the said provisions relate to chemists and druggists under this Act, they shall only take effect after the publication in the Dublin Gazette of the notice of the approval of a resolution with respect to the title of chemist and druggist."

The Council having ignored the grade of chemist and druggist, no such notice could appear, consequently such persons are removed from the purview of the Act, and all subsequent provisional regulations affecting them are

annulled.

Now, provision had been made for registering chemists and druggists in a separate list-had the Council adopted such a grade—but mark (Sec. 21), they were only such persons as should "present themselves for examination," and be examined in a modified course.

When we come to Sec. 31, we find the right to sell poisons reserved to "chemists and druggists," "who are practising as such at the time of the passing of the Act," but no power is given to the Council to compile a register of such persons either compulsorily or at their request. In fact, there appears to be a special provision to the contrary.

The section enacts, "Nothing in this Act contained shall extend to or interfere with . . . . the business of . . chemists and druggists who are practising as such at the time of the passing of the Act." Here the power of compelling such persons to register is expressly withheld from

the Council.

This is the greatest difficulty which our Council has had to contend with since its formation, and it has been constantly endeavouring to get the power of framing such a register, by means of a Government amending Act. At one time we had some hopes of getting this done, but these hopes have vanished, and we have little chance of legislation unless we can induce some private member of Parliament to take up the subject.

Until we succeed in this, I quite agree with you that "the regulation of the sale of poisons cannot now be effected under the present Act," though I cannot, for the reasons given above, agree with you that the difficulty is to be so

easily got over.

With regard to the matter of ancient history to which you refer, I was not even a licentiate of the Society when the original Council decided on adopting one grade only, but I fully concur in that policy; and the present Council, who may be supposed to know something of the requirements of the country, are unanimous on the point. The breakdown at Belfast appears to have been owing to the omission to put before the Court the working of section 19, and what follows

The evidence (if correctly reported) was also misleading, as a licentiate of the Society is represented to have testified that certain persons in business before the passing of the

Act could compound medical prescriptions.

Herewith I send a copy of suggestions for amendments of our Act, which were adopted some years ago by our Council. You will there see that it has not overlooked the point which appears so plain to you, but which is really surrounded by I remain, sir, faithfully yours, difficulties.

August 22. J. E. BRUNKER.

[We did not say, nor do we think, that the difficulty of applying the poisons regulations of the Irish Pharmacy Act can be easily got over. What we say is that for that difficulty the Council have no one but themselves (or their predecessors) to thank.]

#### Construing the Medicine-stamp Act.

SIR,—Having submitted my labels to the authorities at Somerset House, and received in reply several of them stamped "liable to duty," I entered upon the following correspondence, which I thought might possess some interest to the trade in general:-

" The Secretary, Inland Revenue.

"SIR,—In reply to your favour of the 2nd inst. I beg respectfully to submit to your notice the following observations. The Golden Eye Ointment has been sold by most chemists under this name for many years, and it would be difficult, if not impossible, without using these terms, to distinguish this medicine from any other, which is the object lawfully sought to be attained. This case seems exactly parallel to that of the adjoining label, marked 'not liable'— mild aperient pills where the epithet 'mild' distinguishes that particular aperient pill from others in the same way as 'golden' from other eye ointments. The essential oil of camphor is a pure and simple drug, sold as imported, without pretence of secret composition or peculiar proprietary right. May I plead for a reconsideration of the matter? The expressed oil of mustard is sold as Colman's mustard oil, recommended for different complaints, without the stamp, so also is vaseline; and this seems an analogous case.

"The spirit of menthol is a simple solution of the drug in spirit for convenience of application, and since menthol is official in the Pharmacopœia, I had no intention of infringing the Act by having this label printed. I regret having to trouble you at so great length, but finally with regard to the catarrhal salts, would not the fact that the preparation is inhaled only exclude it from the category of medicines 'used or applied internally or externally?'

"I have the honour to be, sir, yours most obediently, "J. F. BROWN.

"P.S. My last observation refers to the 3rd paragraph in the general observations enclosed in your letter."

"Inland Revenue Office, July 12, 1887. "SIR,-In reply to your letter dated August 4, I am directed by the Board of Inland Revenue to acquaint you that they consider the 'Golden Eye Ointment' liable to medicine duty as a 'specific.' 'Spirit of menthol' is not within the exemption in favour of drugs 'vended entire' rithout any mixture with any ingredient whatsoever, vide 52 Geo. 3 cap. 150. 'Catarrhal salts' are liable to duty. I am to add that the third paragraph of 'General observations' relates to preparations which are burned in order to impregnate the atmosphere with the fumes, which are breathed; for instance, 'Himrod's cure for asthma.' 'Colman's mustard oil' has been found by analysis to be within the exemption in favour of pure and unmixed drugs above referred to.

"A sample of the 'Essential Oil of Camphor' should be forwarded to the Laboratory at this office for analysis.
"I am, sir, your obedient servant,

"EDWARD BRIGHT."

A sample was sent on July 15, and August 22 the following reply was received from the Board:-

"SIR,—In reply to your letter dated the 15th ultimo, I am directed by the Board of Inland Revenue to acquaint you that the Essential Oil of Camphor, a sample of which you have sent for analysis, appears to be exempt from Medicinestamp Duty. I am, sir, your obedient servant, "EDWARD BRIGHT."

I am strongly of opinion that the only way to put an end to these vexatious and hair-splitting controversies, and to put the matter upon a satisfactory and durable basis, is to restrict the incidence of the Act to the two grounds only of secrecy of composition and exclusive proprietary right. No manner of doubt could arise if nostrums alone were liable, and all preparations bearing on their labels a true and explicit statement of their composition were exempt. It would be equally clear at the first glance whether the maker claimed any sort of monopoly of the right to do so, or simply added his name and address to indicate his responsibility. Such an interpretation of the Act would draw a broad line of demarcation between the practice of legitimate pharmacy on the one hand and everything savouring of quackery on the other; since the preparation fearlessly laid open to medical and public criticism, and relying solely on its intrinsic merits, would be duty-free, while the maker who claimed possession of a trade secret would defend his exclusive privilege by using the Medicine Stamp.

If it is not utterly hopeless to look for any esprit de corps or capacity for united action amongst our demoralised body, I would most earnestly impress upon my fellow-chemists

that this is the true line to work upon.

Dover.

I am, sir, yours very obediently,
J. F. Brown.

Dispensing Errors.

SIR,—I quite agree with "A Layman" that "it is a very lamentable affair when any mistake in dispensing takes place," but I fail to see any very useful suggestion in his letter of August 20. Suppose the physician does write hydrochloric acid in a style which may be mistaken for hydrocyanic acid, why, in all conscience, should a chemist put a killing dose of the latter into the bottle of medicine? From evidence of the sad case at Bolton, I understand the defence was the chemist was in a hurry. But this is no excuse for putting an overdose of hydrocyanic acid in a mixture. A candidate for the Minor examination will stand a poor chance in prescription-reading if he cannot check overdoses. It almost seems to me more excusable to dispense the wrong

ingredient than overdose the same. I wonder if that hydrocyanic acid was under lock and key in a poison-cupboard. This is often sufficient to prevent mistakes, but for someone to check the poison, especially when in a hurry, would be most reliable. I have heard of such a thing as absentmindedness. In such a case it would be dangerous, no matter what nomenclature the physician used.

PHARMACEUTICAL CHEMIST. (148/23.)

#### A Stove Wanted.

SIR,—Can you tell me if there is any description of stove specially adapted for ordinary back-shop purposes—something which would, in cold weather, take the place of an ordinary fire, but be applicable as a source of heat for the various pharmaceutical operations usually conducted by the retail druggist, including desiccation of such substances as the sulphates of magnesia, and iron?

Yours truly, CALORE. (148/14.)

[We shall be glad to receive opinions of subscribers on this subject.-ED.]

#### The Toughened-glass Mortar.

SIR,—The usual explanation given is that in the process of toughening the crystalline arrangement of the glass is altered, so that the vessel will stand a heavy blow from an object softer than itself; but if struck with a hard and sharp instrument, or by such a thing as a grain of sand under a wooden mallet, the structure of the glass gives way, and the vessel becomes a mass of "confused cubes"—the peculiarity of which seems to be that the cubes have few or no cutting edges. About four years ago a mortar which had been in use eight years came to its end by what was apparently a slight change of temperature only. Some salts had been rubbed down and dissolved in it, and my apprentice was swilling it out at the water-tap, when it fell to pieces. Therefore I conclude that there are other theories in explanation than the percussion one. Perhaps the glass, as is the case with some kinds of brass, assumes a crystalline condition in the course of time. Shall be very glad to see a scientific explanation. Yours truly, HEDER.

SIR,—If the owner of such articles examine them before use, he will find probably a crack in the inner part of the glass. Friction will cause said crack to elongate itself, and come to the outside; the friction being continued causes heat, hence the results in your correspondent's hands. Toughened glass is somewhat like a Rupert's drop: make an abrasion, and it will shiver sometimes into pieces, and again into powder. Moral.—Beware of toughened-glass mortars. The writer carried in his bag a toughened tumbler all the way from Paris, whole. On arriving home, and opening the bag to display the trophy, it burst itself almost into dust. The only conclusion I could arrive at was that change of temperature caused it. FRICO. (150/11.)

A very reasonable explanation of the sudden and total disintegration of toughened glass was given by a correspondent of this journal in a discussion on the subject last year. His letter will be found in our issue of April 26, 1886. theory advanced by him, or rather by a chemistry lecturer, was that there is in all toughened glass a point, or node, which when touched induces the disintegration of the glass. This theory was corroborated by a glass manufacturer, who suggested that the node was the point of the glass which first touches the hot paraffin, or other liquid, in which it is toughened. This seems a very reasonable explanation, especially if the disintegration is taken as analogous to the sudden crystallisation of a super-saturated solution, e.g., of sodium sulphate. If a small particle of a solid be dropped into such a solution, complete crystallisation takes place at once. Toughened glass is composed of silicates in the vitreous state, and when the node is touched the whole mass is immediately changed to the crystalline state-just as "Rupert's Drops" crumble when the point is broken

#### Stencil-Plates.

SIR,-Many of your readers may not have thought how useful a set of stencils would be in their shop or warehouse. I have had a set in use for some time now, and find them come in for a great many purposes, and as they are very easy to use, and by a little practice can be used very quickly, the advantage over handwriting or lettering is very great. I use them to address the large parcels going by parcel-post or rail, large stock parcels or cases, and in the warehouse they are constantly employed. I would recommend for ordinary purposes, say for addressing parcels, &c., the \frac{1}{2} inch size; a whole set, including figures, ink-brush and sponge, can be hought for 2s. 6d., cut in spring brass, and a larger size may be bought for cases, &c. I have four sets, and I use the larger sizes for the initial letters; this gives a better appearance than if all the letters are of one size. For convenience of picking out the letters required, I got a piece of planed board the required size, and divided it with a pencil into as many squares as I had stencils, and, having punched a small hole through each stencil plate, I drove into the board a sufficient number of small pins on which to hang the stencils, and marked each square with its own letter to facilitate the return of the stencils to their proper places. stencils are merely kept in a pile the delay in picking out the required letters is very great. One of the working mottoes of a chemist should be "decently and in order," and a stencil-plate well applied certainly tends in that direction.

Faithfully yours,
ACID TART. (3/142.)

#### LEGAL QUERIES.

51/147. O.—We doubt whether a court would find that fly-papers can be regarded as legal "poisons"; and we are sure it would be unwise to employ the machinery of the Pharmacy Act to stop the sale of them by unqualified persons. If they are poisons, preparations of arsenic, e.g., what chemist fulfils the law in regard to labelling them and registering the sale?

2,149. J. S.—The Lincoln company claim the exclusive right to use the term "blood mixture," which they have registered as a trade-mark. Messrs. Beedzler & Co. are disputing this right, and the action between the parties is ready for trial. Until a court shall have decided the issue we are obviously bound to suspend our opinions. The question of "colourable imitation" is not necessarily raised in reference to this claim.

51/148. Kino asks if a cough-mixture containing a small proportion of chlorodyne is required to be labelled "poison." Strictly interpreted, the Pharmacy Act seems to demand this; but high authorities consider that a mixture containing only a minute proportion of a poison cannot be regarded as a preparation of that poison in the meaning of the Act. In this view (for example) tincture of opium is a "preparation of opium," but Keating's Lozenges (supposing them to contain a minute proportion of opium) would not be.

4/271. Statim.—It would not be legal for an unregistered person to use the title "veterinary chemist." The 1l. shares of the Chemists' Aërated Water Association are said to be worth 25s. each. When a holder sells any he must send a 6d. transfer duly signed and witnessed to the secretary of the association, with certificate of his share and a fee of 1s., before the transfer can be registered. The length of time allowed for hired syphons varies according to the trade done

44/148. C. A.—There is nothing in English law to prevent an unregistered person dispensing prescriptions which do not contain any scheduled poison.

WE have often urged chemists who may be in doubt about the liability of their labels to medicine stamp duty to take advantage of the promise obtained by the late Chemists'

Trade Association from the Board of Inland Revenue that they will when asked declare whether a particular article is or is not liable. It is obvious that nobody's mere opinion can be of any real value as compared with the authoritative decision of the Board who adminster the Act, which can only be overruled by a court of law. It ought to be clearly understood, however, that in submitting labels to the Somerset House authorities these should be accompanied by copies of all printed or manuscript matter relating to the preparations in question, and all should be sent in duplicate. To simplify the matter we understand that Mr. Haydon has prepared a printed form to accompany labels, merely requiring for its completion the insertion of the name and address of the applicant, and that one of these will be forwarded to any chemist and druggist who sends a stamped addressed envelope to the offices of his agency at Birmingham.

73/149. H. W. H.—We should not consider that the use of the term "veterinary chemist" by a chemist and druggist infringes any law or anyone's rights.

#### DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

#### Salicylate Mixtures.

Heder will be glad to hear if age causes a yellow coloration when sodium salicylate is dissolved with potassium bicarbonate.

[The coloration of mixtures containing sodium salicylate and alkalies is a matter of common observation—in fact solution of sodium salicylate (artificial) alone generally acquires a tinge of colour, owing to the presence of minute traces of impurities in the salicylate. Bicarbonate of potash in solution gradually gives off a little carbonic acid, with change to the carbonate state, and this change is said to influence the coloration of such a mixture as "Heder's" example.]

#### Illegible Prescriptions.

A CORRESPONDENT sends us a bundle of Dr. Ward Cousins's autograph prescriptions, which he says are "really shocking to look at." The following is the worst specimen; how many can decipher it?

The My hima.

mies & o Ker

Caphy se 355

Grandi off

and if

#### Doubtful Names.

148/60. West Riding has dispensed a prescription for pills containing "pillanuff" and "bieroneal." For these he gave "pil. colocynth co." and "pil. calomelanos." Was he right?

#### Copaiba Resin Emulsion.

149/48. C. G. C. would be glad of a practical solution of the following dispensing difficulty:—

 Resinæ copaibæ
 grs. 160

 P. tragae, co...
 ij.

 Aq. ad
 3viij.

 Misce et fit t mistura

[If permissible rub down the resin with a drachm of sugar of milk and the compound tragacanth powder until it is in a state of fine division, then add the water gradually. The result will be a good emulsion.]

#### Mr. Russell's Prescriptions.

149/37. E. G. sends the prescription containing Gavelle's Extract, which has so often been printed in this journal. He asks if "some student of the 'mystical and occult' would throw a light on the composition of the extract. The prescription was handed in with the remark that the last chemist who dispensed it said it took fifteen days to make!"

[Perhaps that chemist has discovered Mr. Russell's soft side, if the reducer of corpulence has one. We have always understood that Mr. Russell carefully guards the process for making the extract.]

#### An Emulsion.

SIR,—Will you kindly inform me whether it is possible to make a perfect emulsion of the following:—

 Sapo mollis
 3iij.

 Ol. rapii
 5vj.

 Ol. tereb.
 3ss.

 Sp. cornu. cervi
 3ss.

 Aquæ
 3j.

By doing so you will greatly oblige, J. E. (144/50.)

[Mix the oils and sp. cornu cervi together. Rub up the soap with the water, and add the oil mixture gradually to it, carefully incorporating each portion before adding another. A fairly satisfactory cmulsion results.]

#### MISCELLANEOUS INQUIRIES.

#### Books

145/23. Molestus.—Oliver's "Lessons" will only be useful to you for the Minor botany if you go into the fields—and that you should not fail to do. Those who have used the "Lessons" find that they have little difficulty with the diagnosis of flowers, &c.—a most important acquirement at the examination table. Bentley's "Structural and Morphological Botany" (Churchill, 7s. 6d.) is sufficient for the Minor, but the Manual (15s.) is a better bargain and a more generally useful book.

149/34. W. C. Marshall.—Gerrard's "Materia Medica and Pharmacy" is published by Lewis; price 10s. 6d.

140/2. C. B. C.—Violet Powder Perfume.—The formula given on page 177 should read:—

Gold Toning Solution.—F. B. F. (146/61) writes:—
"On mixing the following (although kept in the dark) a
black precipitate is gradually formed, rendering the solution
useless for toning photographs:—

Can you tell me what is the cause, and what the precipitate may be?"

[The precipitate is gold in a fine state of division. Chloride of gold is remarkable for the readiness with which it is reduced to the metallic state, and that, indeed, is the reason why it is used for toning photographic prints. The exciting cause of the reduction in the case of the solution is the acetate of soda. Our correspondent should keep a stock solution of the gold chloride in plain water, and add the acetate of soda to a small quantity twenty-four hours before the solution is required for use. The solution containing acetate will keep good for two or three weeks. The bicarbonate of soda may be added when the bath is required.]

Lemonade Query.—J. R. B. (144/37) writes as follows:—
"When 40 grains of bicarbonate of soda and 40 of tartaric acid with a drop of ess. limonis, sugar  $\frac{3}{4}$  oz. to sweeten, and  $\frac{1}{2}$  pint of water are allowed to remain in a bottle for a few days, some bottles become thick, just like white of egg, others remain quite fluid. Can any of your correspondents explain the decomposition which takes place, or how it can be remedied?"

[J. R. B. will find that it is because the bottles, in which the lemonade becomes thick, are not absolutely clean. Such bottles have the germs or spores of organisms adhering to them, and these are nourished by the saccharine matter in the fluid, the result being the formation of a filamentous growth, which imparts a thickish appearance to the lemonade. The bottles should be thoroughly cleaned and finally steeped in very hot water and dried in an oven before they are filled. The water used, if not direct from a spring, should be boiled.]

148/15. T. Casely.—Spirone is the subject of a patent granted to Dr. J. F. Churchill. The specification, which may be procured at the Patent Office, will, no doubt, contain the formula of the liquid.

147/41. Barbados.—Glacial Acetic Acid may be reduced to the strength of ordinary acetic acid (acid. acetic. fort) by diluting each ounce by weight with 2 oz. of water. The resulting mixture may be used for any purpose to which acetic acid is put, but it is too strong for pickling, and should, for this purpose, be further diluted with three times its volume of water.

147/28. W. W.—Toothache Snuff.—A powder sold under this name which we recently examined was simply powdered white hellebore. A remedy in this form (introduced a few years ago) was stated to contain aconitine with a little morphine, starch and bicarbonate of soda being the diluents. This was supposed to act by paralysing the nerves. A preparation of that nature would not be safe to sell in 1d. boxes. Try the following:—

 Bicarbonate of soda
 3ij.

 Powdered starch
 3j.

 Powdered hellebore
 5j.

 Cocaine hydrochlorate
 gr. x.

 Mix.

Koumiss.—J. P. (146/40) has been making koumiss with 30 grains fresh yeast, 90 grains sugar, and 12 oz. milk, corking and keeping for seven days. Fresh cow's milk made it far too thick and sour; he then tried milk twelve hours' old with the 'cream skimmed off it, but it was unsatisfactory. A better recipe, with directions for making it, is required.

[Artificial koumiss is rather troublesome to make properly, but the following formula (by Mr. Adam Gibson) is one of the best we know of, and generally gives good results:—

						Oz.
Skimmed cow's r	nilk		••			150
Water				• •	••	50
Brewer's yeast						1
Cane sugar		••		••	••	3
Milk sugar				••		5

Dissolve the cane sugar in 20 oz. of water, add to half of the milk, and set aside in a warm place for six hours until fermentation begins, then add the rest of the ingredients (the milk sugar being dissolved in the water), mix well, strain, and bottle.

At the ordinary temperature the beverage is ready for use in from four to six days. Koumiss should not be made with unskimmed milk, because it is apt to acquire a butyric odour and a very objectionable taste.

148/38. W. Bunker.—Soluble Essence of Lemon.—The best essence is made from fresh lemon peel in the same way that tr. aurant. recent. is made. The essential oil is rendered soluble by treating with light carbonate of magnesia. Place 1 oz. of the magnesia in a mortar, add 1 oz. of oil of lemon, triturate well, then add 12 oz. of rectified spirit, and transfer to a bottle, shake occasionally during a day, then filter and wash the magnesia with 3 oz. of rectified spirit.

#### Notes by "Heder."

Drink for the Harvest Field.—I recommend "Bibo" to try the following:—

Sugar		••		••	½ lb.
Barley meal	• •		••	••	4 oz.
Citric acid		• •			•• ½ ,,
Essence of lem	on				20 drops
Boiling water.			••		1 quart

Mix and strain, then add cold water to make a gallon.

Preservation of Leeches.—I might have added to my note last week that my friend powdered up the peat coarsely, and filled one side of his aquarium with it. The vessel was then filled up to the height of the division with water. There was also a piece of perforated zinc in the lower part of the division to allow circulation of the water.

The Discoloured Cold Cream.—Your correspondent "Bill" (145/10) advises the addition of liq. potassæ. Some years ago we were accustomed to use a small quantity of sodæ bicarb., as the other alkali produced a disagreeable odour. The discoloration occurred now and then with the soda; the only cure was to make a smaller batch more frequently.

148/61. Wilts.—Dulcified Spirits of Salts is a spirituous solution prepared by acting upon rectified spirit with hydrochloric acid, and distilling the mixture. It was official in the Dublin and Edinburgh Pharmacopæias. In an old receipt book we find the following note:—

To Remove Hair from the Chin.—Women of sanguine complexion and habit have frequently hair growing on their chin, which is very unseemly. To extirpate use dulcified spirits of salt on the part, and rub it gently with a linen cloth; this will effectually kill the roots of the hair, and at the end of a week they will wither and fall away.

Testing for White Lead.—R. W. (148/53) puts this question:—"A paint already mixed is supposed to contain white lead. Could you give me a ready, simple, and effective test to find whether the paint contains white lead?"

[Wash about a drachm of the paint with ether in order to remove the oil, then dissolve the residue in nitric acid, dilute with water and test for lead. Hydrochloric acid will give a white precipitate (soluble on boiling), and potassium chromate will give a yellow precipitate if lead be present.]

149/57. Ll. wants a syrup which will give Effervescing Draughts a "body." He uses syrup of lemon, but that does not suit, and the froth is too evanescent. What he really requires is a "heading" liquor. Either tincture of quillaia or tincture of senega may be used for this purpose—a few drops of either to each draught will give the desired result. Lamplough's syrup probably contains glucose.

Lapis Baptista.—Dr. Stephan Mierzinski writes from Vienna in reply to N. S. Naftel's question regarding lapis baptista, and states that it is nothing else than powdered Venetian talc, which in some parts of Germany is vulgarly called baptising-stone—hence the Latin name. Can any one oblige Dr. Mierzinski with a formula for "Jockey varnish"?

148/55. C. E. L. — To make malleable iron the colour of copper immerse it in a solution of sulphate of copper, then wash well, dry and varnish while warm with a varnish composed of resin 3 lbs., boiled linseed oil 10 pints, turpentine 2 lbs.

273/18. Enquirer asks if "any of our numerous correspondents can inform him if a material like cloth can be obtained, that when manufactured into a suit would prevent the wearer from sinking in water; and does it answer?"

[The fabric referred to is probably that which was invented by the late Rev. W. Cowell Brown of Sheffield, who made several successful experiments with it. Does anyone know if the invention has proved practicable?]

149/38. Lorgnette.—The British Museum Library is the best one, but there is generally some difficulty in getting books. The Patent Office Library, Southampton Buildings, Holborn, is more convenient, and contains a fair selection of chemistry and physics text-books.

50/148. W. P.—You cannot become a qualified dentist without going through the regular curriculum, which occupies at least two years. For full particulars see our educational number, September 18, 1886, or September 17, 1887 (to be published). But you can draw teeth and do other dental operations, not calling yourself a dentist, without going through this course.

146/47. An Old Subscriber.—The Face Powder is composed of starch, tale, subnitrate of bismuth, and a little calamine. The following formula will make a preparation similar to it:—

Starch, in fine powder . . . . 2 drachms
Tale . . . . . 10 ,,
Bismuth subnitrate . . . . 20 ,,
Calamine, sufficient to colour
Oil of ylang-ylang . . . 1 drop
Mix thoroughly.

149/55. Dispensing Labels.—Unicorn points out that the use of the Royal Arms on labels requires a licence, and that penalties and prosecutions have already been commenced. We gave a caution regarding this in our issue of the 13th inst. We presume, however, that prosecutions are only instituted in cases where the arms are used as if by authority. We are now open to receive subscribers' comments on the labels.

147/27. Alois.—Naval Hospital Dispenserships.—There are fifteen of these appointments, and they are open to those who possess the minor or major qualification. The pay is at the rate of 5s. a day for the first five years, rising to 8s. 6d. per day when 20 years' service is put in, after which it rises 6d. per day per year until a maximum of 10s is reached. There is additional pay for dispensers in stations abroad, and those who have charge of stores also receive better pay.

#### Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

148/5. Formula for kali to sell at 6d. a pound and leave a good profit.

149/39. Formula for breeches paste.

149/28. Embelia ribes.—The seeds of this plant, which is a native of India and belongs to the natural order Myrisineæ, have been recommended by Dr. G. H. Harris, of Simla, as a specific for tapeworm. Dr. Dymock states that the seeds are imported largely into Germany, and Dr. Harris says they can be procured from "any druggist in London." The seeds, we may mention, are said to be used by the Malays to adulterate black pepper. Where can they be obtained?